

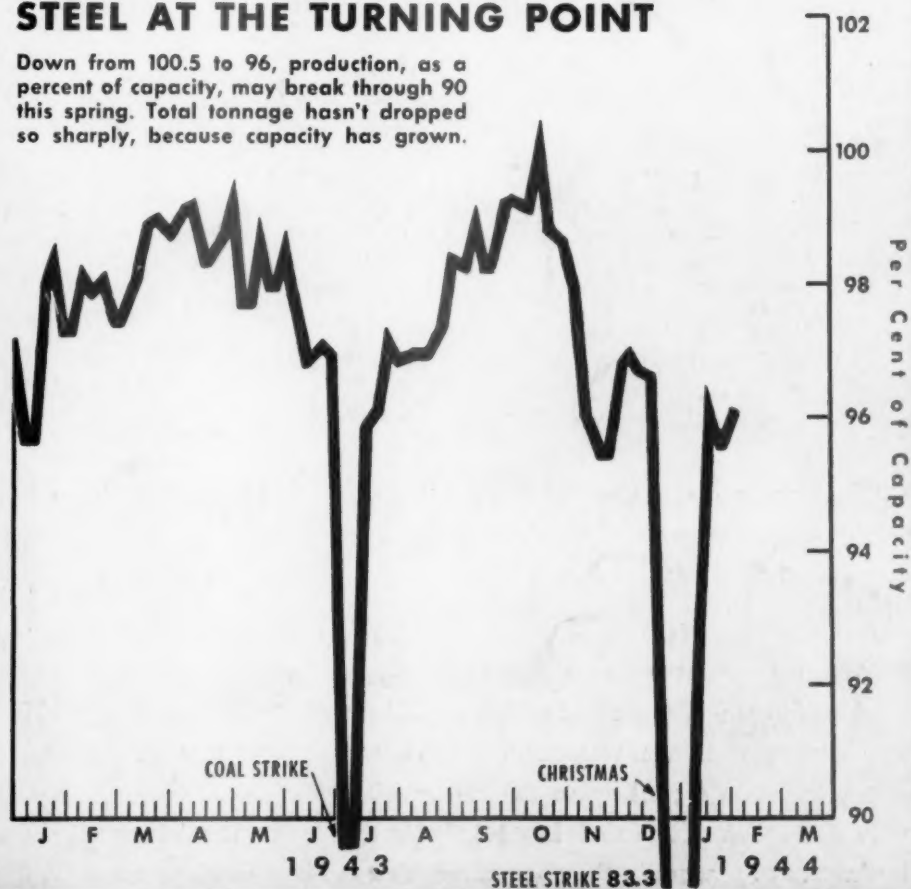
# BUSINESS WEEK

WEEK  
AGO

YEAR  
AGO

## STEEL AT THE TURNING POINT

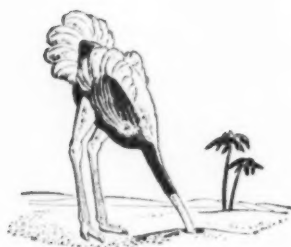
Down from 100.5 to 96, production, as a percent of capacity, may break through 90 this spring. Total tonnage hasn't dropped so sharply, because capacity has grown.



BUSINESS  
WEEK  
INDEX

PUBLISHED BY THE MCGRAW-HILL PUBLISHING COMPANY, INC. • TWENTY CENTS





## "Postwar Planning"

**T**OO many companies today are using the ostrich technique—"if you don't see unpleasant facts, they aren't there".

An unpleasant fact in industry is that thousands of American plants are carrying the high-cost burden of out-of-date machine tools but will have to compete, after the war, with foreign and domestic plants tooled up to the minute. War with three-shift production has blinded many businesses to that truth; the competition that is

coming will bring it out into pitiless light.

But managers who intend to survive are doing something about it, *now*. Working with Warner & Swasey engineers, they are planning their postwar turning departments, with modern Warner & Swaseys that will bring costs down to meet competition, and so broaden markets and offer job security. *And they are placing their orders now* for the delivery of Warner & Swaseys as soon as priorities permit.



YOU CAN TURN IT BETTER, FASTER, FOR LESS...WITH A WARNER & SWASEY





## Rubber rings without rubber for canning beans without cans

*A typical example of B. F. Goodrich product development*

SEVERAL million cans of food products almost didn't get canned last summer. Glass jars could be used instead of scarce tin cans but that meant rubber sealing rings, and not enough rubber could be spared then to pack the whole crop. So canners hesitated to order from farmers, and farmers didn't know what to do with their crops.

Engineers at B. F. Goodrich knew about experiments to make rubberlike materials out of soy beans, linseed oil and other things. So far nothing had been produced which was enough like

rubber to have its sealing properties.

But B. F. Goodrich men had worked for years with almost every conceivable elastic material. They believed one or more of these materials might have enough elasticity if they could be solidified and then vulcanized like rubber. They tackled the problem, starting with nothing more than a sticky mass, and soon found a way to make it solid without losing its elastic properties. Then they compounded it so as to make it so nearly like rubber that it could be worked on existing rubber machinery.

The result was a sealing ring which was not as elastic as rubber but had all the needed properties for the purpose, yet used no critical materials. Canners ran accelerated tests—then ordered the rings by millions, and saved thousands of tons of foods that might otherwise have been lost when the country needed it most. *The B. F. Goodrich Co., Industrial Products Division, Akron, O.*

**B. F. Goodrich**  
RUBBER and SYNTHETIC products





## THESE STORAGE BATTERIES ARE **VETERANS** OF TWO WARS

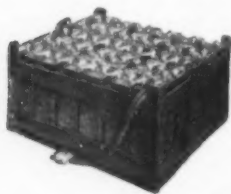
During World War I, a New England plant installed a fleet of battery industrial trucks each provided with two Edison Alkaline Batteries, one to operate the truck while the other was on charge. The trucks worked around the clock on war production, but after the Armistice the plant went to an 8-hour day so that one battery per truck was enough and the spare batteries were not needed. They were put into storage and there most of them remained until the outbreak of the present war.

Now they are again in service. In spite of the fact that most of them stood idle for nearly a quarter of a century, they are doing a completely satisfactory job keeping the trucks supplied with power. In fact, shortly after the outbreak of the present war, the plant purchased a new truck without a battery because its reserve stock of spare batteries was still ample.

The current performance of these veterans of two wars is living testimony to the extra reserve dependability in the Edison Alkaline Battery. Some of the unique characteristics which account for this dependability are cited in the column below.

### ADVANTAGES OF THE EDISON ALKALINE BATTERY IN INDUSTRIAL TRUCKS AND TRACTORS

- ★ It is durable mechanically. High strength steel construction is used in the containers, grids, pole pieces, etc. The electrolyte is a preservative of steel.
- ★ It is foolproof electrically. It may be accidentally short-circuited, over-charged, over-discharged, or even charged in the reverse direction without injury.
- ★ It can be charged rapidly. It is not subject to finish-rate limitations. It requires no equalizing.
- ★ It withstands temperature extremes. It is not damaged by freezing. Free air spaces on all sides of all cells provide ventilation for rapid cooling under high temperature conditions.
- ★ It is simple to maintain. Merely charge adequately, add pure water, keep clean and dry.
- ★ Its tray assembly and cell connections are extremely simple.
- ★ Its life is so long that its annual depreciation cost is lower than that of any other type of storage battery.



EDISON STORAGE BATTERY DIVISION,  
THOMAS A. EDISON, INCORPORATED, WEST ORANGE, N. J.

# Edison

## ALKALINE BATTERIES

## BUSINESS WEEK

### WHERE TO FIND IT

Washington Bulletin	1
The Outlook	1
Figures of the Week	1
General News	1
Commodities	1
Finance	1
Production	1
New Products	1
War Business Checklist	1
Marketing	1
The Regional Markets Outlook	1
Labor	1
The War—and Business Abroad	1
Canada	1
The Markets	1
The Trading Post	1
The Trend	1

### THE PICTURES

17—Harris & Ewing; 18—(left) Acme; 19—Wide World; 21—(left) Acme; 32—Harris & Ewing; 82—Michael Caputo; 88—Acme; 113—Int. News; 114—Press Assn.

### THE STAFF

**Publisher,** Willard Chevalier • **Manager,** Paul Montgomery • **Editor,** Ralph Smith • **Managing Editor,** Louis Engel • **Assistant Managing Editor,** Clark R. Pace • **News Editors,** Richard Lamb, Raymond A. Dodd (Illustration).

**Foreign,** John F. Chapman • **Production,** W. W. Dodge • **Law,** J. A. Gerardi • **Finance,** W. McK. Gillingham • **Marketing,** Phyllis White (Washington) • **Industry,** Clarence Judd (Cleveland) • **Economics,** Sanford S. Parker • **Labor,** M. S. Pitzele • **Washington,** Irvin D. Foos, John L. Cobbs, Stuart Hamilton.

**Editorial Assistants,** Brownlee Haydon (Assistant Foreign Editor), John Hoffman, C. Arthur Lamb, Richard M. Machol, M. J. Montgomery, Arthur Richter, Margaret Timmerman, Dons White • **Statistician,** Alice McFall • **Librarian,** Ruth Wall.

**Editorial Bureaus—Chicago,** Arthur Van Vliet, Mary Richards • **Detroit,** Stanley H. Brams • **San Francisco,** Cameron Robertson • **Washington,** McGraw-Hill Bureau. Staff correspondents throughout the United States, and in Canada, Latin America, Great Britain and the Soviet Union.

**District Managers—Atlanta,** R. C. Maulsby • **Boston,** Nelson Bond • **Chicago,** Arthur Cardwaine, R. N. Whittington • **Cleveland,** S. D. R. Smith • **Detroit,** C. W. Crandall • **Los Angeles,** R. N. Phelan • **New York,** H. E. Choate, J. R. Hayes, J. H. Stevenson • **Philadelphia,** H. C. Sturm • **San Francisco,** J. W. Otterson • **St. Louis,** G. G. Sears.

### BUSINESS WEEK • FEBRUARY 5 • NUMBER 751

(with which is combined The Annalist and the Magazine of Business). Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman, PUBLICATION OFFICE, 99-129 NORTH BROADWAY, ALBANY, N. Y. NEW YORK, EDITORIAL AND EXECUTIVE OFFICES, 330 W. 42ND ST., NEW YORK 18, N. Y. James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President; Curtis W. McGraw, Treasurer; J. A. Gerardi, Secretary. Allow ten days for change of address. About subscriptions address: J. E. Blackburn, Jr., Director of Circulation, Business Week, 330 West 42nd Street, New York 18, N. Y.

Subscription rates—United States, Mexico, and Central and South American countries \$5.00 a year, Canada \$5.50 for a year. Entered as second class matter December 4, 1936 at the Post Office at Albany, N. Y., under the Act of March 3, 1879. Return postage guaranteed. Printed in U. S. A. Copyright 1944 by the McGraw-Hill Publishing Company, Inc.



## Postwar Collectivism

Sentiment is growing among industrialists and government officials for continuing into the reconversion period, and even into postwar, concerted-action plans used to obtain efficient war production and distribution.

The prerequisite, of course, would be an extension of a hands-off antitrust policy. This is by no means assured, but WPB moved this week to give individual industries' collective advice even greater weight during the transition period than it did during conversion of industry to war production.

An opportunity to preserve the benefits of concerted action is seen in the fact that war production mechanisms may not be terminated abruptly, as was NRA. Some business men, even though they have been irked by certain aspects of wartime government supervision, feel that this price is not too high to pay for a chance to escape reversion to "wasteful competitive practices."

## Dealt in on Reconversion

Early in the war, WPB, OPA, and other war agencies arrived at a working agreement with the Dept. of Justice under which the department's Antitrust Division sanctioned industry-wide consultation on production and prices, so long as the function of private business was purely an advisory one, and that action was taken only by government authorization or order.

WPB has now strengthened its business advisory committee setup by establishing a rule making it compulsory for its officials to inform industry advisory committees before making any material changes in limitation and conservation orders. This action is significant because relaxations of such orders are the stepping stones to reconversion. It is concrete evidence of WPB's willingness to deal industry into the day-to-day decisions leading to reconversion.

## Justice Dept. Suspicious

In the present framework, concerted-action plans may function smoothly for some time to come, but there are distinct pitfalls in the path of their indefinite continuance into the postwar period. The threat comes from both the Dept. of Justice and industry itself.

The Dept. of Justice has, all along,

been a reluctant, silent partner to government-industry programs which have bypassed the antitrust laws in the interest of war production. One of the antitrust officials expressed the general feeling of the department when he said: "The temptation to violate the antitrust laws is just as strong as the temptation to drink hard liquor." Its attitude toward government sponsorship of joint-action plans is that one drink leads to another.

The Dept. of Justice is ready to jump anybody who steps over the official line. The antitrust squad spent years after the demise of NRA attacking collusive practices which had their origin in the codes. It expects a similar mopping-up process, on an even bigger scale, to follow the war.

## Competition Re-Awakens

Under the stress of competition, some collective action plans will collapse without pressure from the Dept. of Justice. Already there are signs that members of some industries, who were willing to be represented by their advisory committees in matters pertaining to war production, have begun to feel differently now that these committees are dealing with problems concerning resumption of regular production.

Trade associations, which have been held at arm's length by WPB and OPA during the war, are waiting for their chance to grab the ball away from the industry advisory committees.

And business men who might like to salvage some of the benefits of wartime collective action, even at the price of government supervision, can't be sure that their competitors will abide by the rules. For example, if price ceilings, originally imposed to prevent inflation, were continued by industry-government agreement, in an attempt to prevent disastrous deflation, it is doubtful if they could be maintained in a highly competitive market.

## Cutback Warning

After months of pulling and hauling, WPB has worked out a new arrangement with the Army and Navy for getting advance notice of contract cancellations or cutbacks.

The procurement agencies have agreed to report program adjustments to WPB's Planning & Statistics Bureau, which will pass the news on to regional offices and other government agencies.

Theoretically, the services have kept WPB posted on cutbacks, but the reporting system has been haphazard. Some of the recent cutbacks caught civilian officials by surprise. Two months ago, the Army instructed its contracting officers to notify WPB of any cutback that would decrease a plant's production by 25%, but other procurement agencies failed to follow suit.

With wholesale cutbacks in prospect after the German collapse, WPB held out for a centralized reporting system and finally got it.

## Subsidy Compromise Out

After a complete whirl, the food subsidy issue is right back where it was before Congress recessed for the holidays. Hope for a compromise on the question prior to presidential action has again been abandoned, and the original strategy of congressional leaders has been revived.

The Senate will pass the Bankhead bill to ban all food subsidies after June 30, except for some support prices for vital commodities.

The House will accept the Senate substitute for its bill to ban subsidies immediately.

A presidential veto is inevitable, and Congress will have to draft another bill extending the life of the Commodity Credit Corp. and giving it sufficient funds with which to operate. The new bill probably will limit expenditures for all food subsidies to one billion dollars a year and prohibit any further rollbacks.

## Truman Backs Civilian Goods

The Senate Truman committee is convinced that manufacture of a considerable volume of civilian goods can be resumed without interfering with war production.

This influential group has not persuaded Charles E. Wilson, WPB's executive vice-chairman, to cross the military's demand that nothing be done till we are over the hump in Europe. However, the committee's attitude is assurance that the Army will meet stiff resistance on the home front if it attempts to block transition to civilian production indefinitely.

The senatorial monitors of the war production program are keenly aware that the "setbacks" suffered by industrial firms and their employees due to



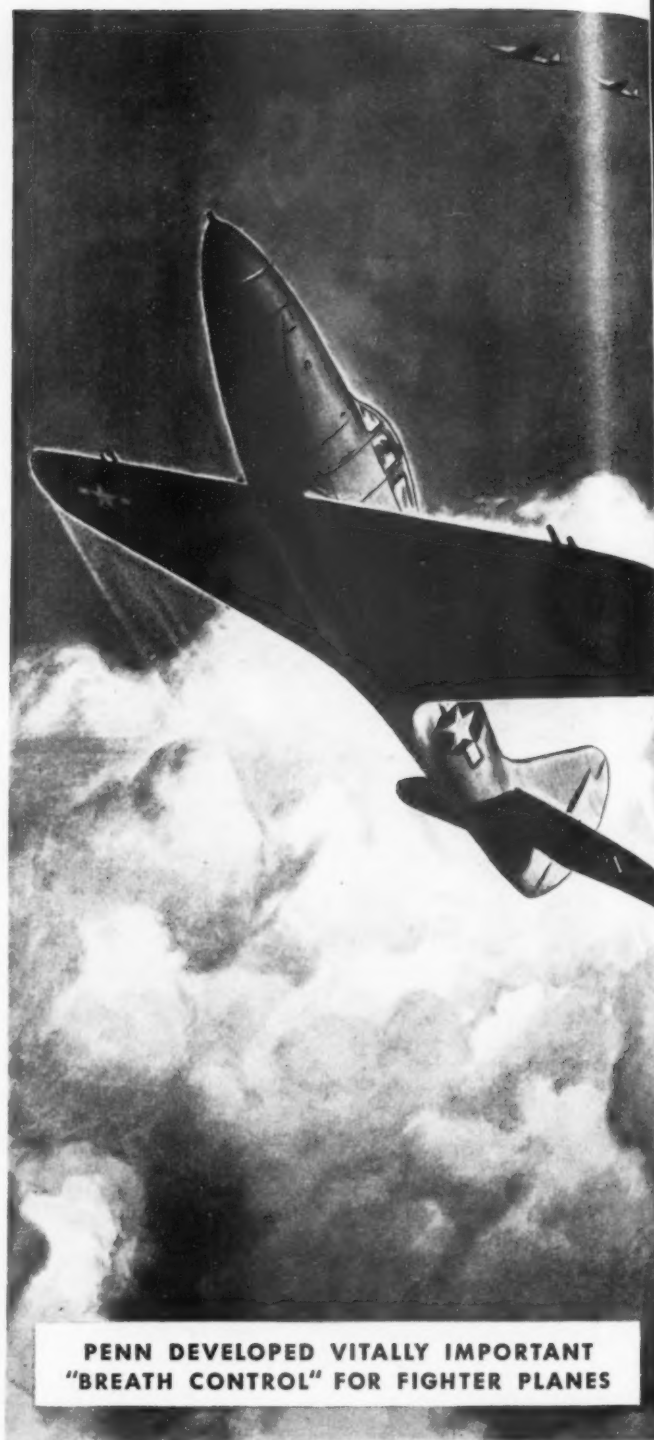
# If Your Post-War Product Needs Automatic Control

*Consult Penn*

In the swift maneuvers of sky fighting a pilot needs free hands—and calm confidence in his ship. To help free his hands, and protect his engine, Penn developed automatic "breath control" for fighter planes. *In this achievement there is significance for all manufacturers whose present or post-war products need controls.*

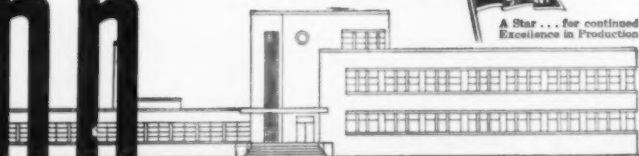
Climbing, diving, wheeling through sudden and drastic changes of altitude and atmospheric pressure, fighter plane engines will "burn up" in a few minutes if temperatures of coolant liquid and oil are not held within proper operating limits. This is the job which the Penn control *does automatically*, by regulating the flow of air past the engine radiator and oil cooler.

Exceptional problems were solved in developing a control to operate accurately and dependably at such swiftly changing atmospheric pressures. The engineering skill, experience and persistence which conquered these conditions are available to manufacturers whose products need automatic control. Inquiry involves no obligation. If you have a control problem, ask us. *Penn Electric Switch Co., Goshen, Indiana.*



**PENN DEVELOPED VITALLY IMPORTANT  
"BREATH CONTROL" FOR FIGHTER PLANES**

# PENN



## AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS



apering off and termination of war orders pose a political, as well as an economic, problem and that this is election year.

## Master Steel Case

The National War Labor Board's unanimous vote to take jurisdiction over all 500 steel companies which have expired contracts with the C.I.O. means that both the union and the industry are agreed on having one master case to decide the many points at issue. The most important of these is the union demand for a 17¢-an-hour wage increase, every mill of which is over the Little Steel formula ceiling.

NWLB will hold a hearing Monday for the 50-odd basic steel companies (BW—Jan. 8'44, p98) to determine procedure. A board committee will classify the remaining companies into appropriate groups for administrative handling.

## In One Bundle

In addition to the 500 companies where the union has recently reopened contracts, NWLB has contacted 77 other firms which have contracts with the union expiring. These 77 are being asked whether they want to negotiate an extension of their present contracts or whether they have objections to the board's granting the union's petition for a retroactive decision.

The steel workers' union has been intent on getting its demands against the entire steel industry wrapped up into one bundle. In this, it has had the support of the Dept. of Labor which wants the many disputes out of its hair. The fact that employer members of NWLB voted to go along on that basis signifies that the industry no longer has any objections.

## Less Paper Work

Although WPB has promised the military to take no major reconversion steps until after a successful invasion, it is going ahead with its plans for simplifying control procedure and cutting down paper work.

As shortages of materials and facilities clear up, WPB is dropping some of its elaborate reporting procedures and detailed controls, falling back on more general restrictions. Pig iron, for example, was removed from allocation Feb. 1. Detailed reports from stainless steel

manufacturers have just been dropped.

A plan for simplifying the system of approving new construction projects is now in the works, and within the next few weeks, WPB will reduce the scope of M-293, the master order for scheduling of critical components.

## Machine Tool Outlook

The postwar outlook for the machine tool industry may be nowhere nearly as dark as it has been painted.

Rough estimates indicate that tool users themselves have bought only 250,000 machine tools in the last five years. This annual average of 50,000 is not much greater than the ordinary volume of orders in prosperous times.

In addition to tools bought for private account, there are, of course, around 550,000 tools owned by the government, but something like 20% of these are special-purpose jobs. Somewhere between 150,000 and 200,000 of the remainder probably will be used to retool government arsenals and equip standby munitions plants. Foreign rehabilitation and industrial development will take another big slice.

## Replacements Needed

What's left probably will go into the domestic market, but experts think industry can absorb this surplus and still support a healthy demand for new tools. The reason is that 70% of the 1,000,000 machine tools in place at the start of the war were over ten years old then (most of them bought during the 1929 boom). Multiple shift operations probably will have made a lot of them ready for the scrap heap by the war's end.

## Navy Operates at York

The Navy pulled a new one on Jan. 24 when it took over the York Safe & Lock Co. of York, Pa. It performed the magic trick of sawing a company in half.

The operation became evident on Monday when the Navy revealed that it had removed eleven top executives including Harry K. Stone, chairman of the board, and Charles F. Sioberg, president and general manager. The Navy made it clear that these officials, representing the corporate soul of the company, could do as they pleased; its sole interest was in the physical body of the company, as represented in its productive plants.

By this means, the Navy plans to overcome the lag in output of guns which it charges against the management of York Safe & Lock.

The ousted executives have established offices in a York hotel. Terms on which the Navy will return the plants to the management have been handed to the executives but have not been made public.

## Food Stockpile?

Food set-asides and allocations for lend-lease to Great Britain, Russia, and other countries are being reappraised by the War Food Administration.

Officials suspect that these earmarkings include numerous contingency reserves for each of the claimant countries that, if consolidated, could be reduced in total amount. They point out that more food thus can be made available to the people of liberated areas, without cutting further into our own civilian supplies.

## Controls for Wood Products

WPB's control over wood products will grow steadily stricter at least until the end of the German war.

Production authorities, badly worried about the shortage of wood, pulp, and paperboard, are trying to figure out a regulatory system that will do for forest products what the Controlled Materials Plan does for metals.

Complexity of the wood-using industries and lack of general standardization make it practically impossible to set up authorized delivery schedules of end products, which is one of the basic principles of CMP. Nevertheless, officials hope to get much of the same effect by closer control of allocations and more emphasis on control of end products.

For some fairly uniform products like containerboard, they may try scheduling of a sort.

## Termination College

The Army Industrial College will take in some representatives from private industry to study contract termination when the third class, probably made up of 250 men, mostly officers, starts Mar. 6.

The Treasury Dept. and the Maritime Service had a student quota of about ten apiece in the first two



**NO ONE ELSE WILL DO ...  
WHEN YOUR  
PROBLEM CONCERNS  
Chemistry**



You wouldn't think of consulting with anyone except a chemist to get the right answer to any problem connected with the science of chemistry.

Likewise, when you're confronted with problems of *printing*, isn't it good sense to consult with a specialist in that complex field—your printer?

Your printer is the man who can give you all the right answers—right away. Next time you have a problem concerning the planning and production of booklets, folders, or business stationery, why not save both time and money. *Consult your printer first!*

Ask him to show you the Nekoosa Bond Plan Book, "It Pays to Plan with Your Printer." See the time-and-money-saving plans it unfolds before your eyes. Of course, those plans work best when printed on Pre-Tested paper—Nekoosa Bond. Your printer will be glad to show you why!

**War makes heavy demands upon Nekoosa-Edwards specialty papers . . . but Nekoosa Business Papers still remain tops in quality!**

IT PAYS TO PLAN WITH  
YOUR PRINTER  
**Nekoosa Bond**

One of the Pre-Tested Business Papers manufactured by the Nekoosa-Edwards Paper Company, Port Edwards, Wisconsin. Companion papers are JOHN EDWARDS BOND, NEKOOSA MIMEO BOND, NEKOOSA DUPLICATION BOND and NEKOOSA LEDGER.

classes. The school term is three weeks. The War Dept. has had about fifty applications from industry but hasn't decided how big a quota it will take. The matter is on Under Secretary of War Robert P. Patterson's desk now.

### Profit-Pricing

Widespread misapprehension that the profit-limiting directive of Economic Stabilization Director Fred M. Vinson on pricing of low-cost essential goods will apply to all civilian goods as they are brought back on the market has finally forced Vinson to issue a public denial. To extricate everybody from the mess which has resulted from the directive's broad wording, Vinson has announced that it will be confined to textiles and apparel, the stuff for which it was issued (page 10).

Vinson has left himself a loophole, however, for wider use of some variant of the directive (BW—Jan. 29 '44, p. 20). He has suggested that, when price adjustments are deemed necessary to overcome shortages, they shall receive "treatment which is consistent in principle with that provided for textiles and apparel."

Without much stretching, this could be made to cover pricing of most of the products of reconversion on the basis of how much money the manufacturers were making.

### Capital Gains (and Losses)

Carpet mills, which faced the prospect of sharp cutbacks in military orders for duck (while a shortage of backing materials would prevent them from reverting to the manufacture of floor coverings), may be saved by a big new Quartermaster Corps program for shelter tents.

Gossip in WPB persists that Donald M. Nelson has no desire to return to private industry, that he'd like to swim in diplomatic circles when war tides ebb, and that he has his eye on the ambassadorial post in Moscow, as a result of his trip to Russia.

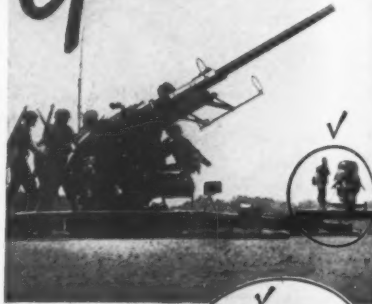
Wayne L. Morse quit the National War Labor Board to run for the Oregon Republican senatorial nomination (against Rufus C. Holman) only after his backers had raised \$50,000 to finance his campaign.

Lawrence Hurley, for several years assistant editor of Nation's Business, published by the U. S. Chamber of Commerce, is the successor to Merle Thorpe, who has resigned after 28 years as editor. Thorpe goes to Cities Service Co. as director of business development.

—Business Week's  
Washington Bureau

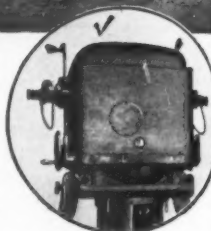
## NEW antiaircraft gun director relies on the

**Graham**  
VARIABLE SPEED DRIVE



INTERNATIONAL NEWS PHOTO

**AN GUN DIRECTOR**  
An anti-aircraft battery is trained on the enemy plane by the Army's new director, consisting of tracker (in circle), electrical computer and range finder. One of the greatest advances ever made in gun fire control.



As one soldier sights the aircraft in azimuth and another for elevation, two Graham-built drives match the speed of the tracker with that of the target. Close speed holding is required over a wide range, forward and reverse. Instantaneous, shockless reversal is essential.

Your machine, too, may need these Graham features:

- Every speed to zero—forward and reverse without stopping the motor.
- Full torque guaranteed over entire speed range.
- Close speed adjustment with accurate return to pre-set speeds.
- Extreme compactness—all metal—self-lubricated—no belts, no tubes, no gadgets.



REMEMBER—ONLY THE  
GRAHAM GIVES YOU  
UNLIMITED SPEED  
RANGE—ALL SPEEDS  
FROM TOP TO ZERO  
AND REVERSE!

Write for Bulletin 506

**GRAHAM TRANSMISSIONS INC.**

2706 N. Teutonia Ave., Milwaukee 6, Wisconsin



# THE OUTLOOK

BUSINESS WEEK  
FEBRUARY 5, 1944



New estimates of manpower shifts in the first half of this year, issued by the War Manpower Commission this week, are reassuring—if taken at their face value. The report indicates that:

The armed services will get the desired net increase of 800,000, raising the enrollment to 11,300,000 at midyear.

The munitions industries will continue at an employment of 9,800,000 (instead of requiring 800,000 or 900,000 more workers).

"Indirect war" industries will need just a slight rise from their present level.

Industries manufacturing for civilians and the trade, service, and self-employed lines will lose only slightly.

Actually, the figures look more like what WMC would like to see than what the agency expects. Realists are agreed that few new workers will be recruited—meaning that an increase of 800,000 in the armed forces will cut just about that number out of industries, trades, and services catering to civilians (BW—Jan. 15'44, p116).

The drain on the "less essential" lines would be even heavier if munitions schedules were pressed forward and if essential lines were to require more workers, but WMC's forecast of little change in these war and indirect war industries is probably pretty close to the mark.

In sifting its labor supply, WMC finds it is working with a "fixed and limited" manpower budget. To provide a net increase of 800,000 in the armed services means inducing 1,400,000 in the half year; agriculture's seasonal expansion calls for 3,400,000; serious shortages exist in such industries as rail transportation, ball bearings, foundries, coal, meat packing, and radio tubes.

Director Paul V. McNutt notes that the "only remaining substantial labor reserve consists of women, but . . . about eight women leave the labor market for every ten who enter it."

Renewed moves of Harold L. Ickes' Petroleum Reserves Corp. this week to put the government into postwar world petroleum development added new color to the domestic crude oil situation. More and more, this question of postwar oil is rising to rival the strictly domestic difficulty of getting out the motor fuel to keep 'em flying abroad and rolling at home.

Not that we are losing our position as No. 1 producer of oil. On the contrary, we are holding it so well that, in 1943, for the first time in history, we made a deep in-road into known reserves.

Always before, this country's oil industry has increased its reserves year after year through discovery of new pools and extension of old ones. Last year (1) production broke all records to total nearly 1,500,000,000 bbl., (2) discoveries and extensions were the lowest since the industry came of age, and (3) we were forced to draw nearly 700,000,000 bbl. of the year's output from reserves.

Warnings of a "day of reckoning" in oil have been voiced periodically for years. Only since the war, however, have most Americans awakened to the realities. (Those who haven't awakened may shortly be jolted in a very specific fashion—right in the gas tank of the family jalopy.)

Crude oil output rose from a 1943 low of 3,826,000 bbl. daily early in the year to an all-time top of 4,436,000 a day at mid-November. Since then, it has fallen off, running along for weeks now nearly 100,000 bbl. below the top. Question haunting the oil industry is: Has the turn come; is age and exhaustion overtaking our fields? (Admittedly, winter weather and manpower shortages are the immediate factors.)

A hint that the topping off of production is more than a mere temporary phenomenon comes from Ickes who, in his role of Petroleum Administrator for War, has



# THE OUTLOOK (Continued)

**BUSINESS WEEK**  
**FEBRUARY 5, 1944**

reduced slightly the production rates certified for various oil-producing states in February as compared with January. To be sure, the cut is microscopic in relation to the total, but much of it is in the midwestern and eastern fields where, says the PAW chief, a reduction is necessary "to conform with declining productive capacity in those areas."

Even if this does not prove a turning point in the country's ability to produce crude oil, it will have its temporary effect on the eastern seaboard's supply of gasoline and heating oil, for it complicates the already difficult transport problem.

**Military requirements again are the crux of the oil situation; figures are secret, but amounts of petroleum products reaching Britain each week are numbered in hundreds of thousands of tons.**

Expect to hear more and more about stretching domestic reserves of vital raw materials, once the war is won, by buying abroad so as to save our own reserves. **This has the additional angle that it will enable backward areas to trade their wealth of materials for our manufactured goods; the plan has an able tub-thumper in William L. Batt**, co-chief of the Allies' Combined Raw Materials Board, who has had attentive business audiences at his recent Chicago and Philadelphia speeches.

This idea—buy raw materials abroad, save our own, and help other nations to buy finished goods from us—hasn't been mentioned much (publicly) in connection with oil, but there are a lot of top people who want to buy foreign crude. **Donald M. Nelson is an outstanding advocate; Ickes and Petroleum Reserve will back him up.**

Buying petroleum abroad will be hard to put over on the domestic industry. The large companies with foreign holdings might go along, but the majority (whose operations are totally within the U. S.) will bring plenty of pressure to bear against it.

**Formal statement by Economic Stabilization Director Fred M. Vinson that his famous price directive was issued specifically for textiles and isn't applicable to reconversion in general should reassure industry.**

Vinson's textile formula was hitched to profits—you get only 2% over cost on the nonwar business, and nothing over cost if your profits on other lines are judged by OPA to be substantial. When this was applied to the program to produce 2,000,000 electric flatirons, it furnished a striking example of how the pricing problem could stymie the whole reconversion effort.

**Industry's profound hope is that Washington will abandon the idea of looking at profits in arriving at reconversion prices.**

**Essentially, OPA has nothing to do with profits. Its province is prices.**

But profits get into the proceedings through the back door. A manufacturer comes in to complain that he isn't making any money—may actually be losing—on one of his products. OPA won't give him a higher ceiling on that one item if he is making good money on a lot of others, thus coming out fine in the aggregate.

**Battles between ersatz materials and those they replaced for postwar markets already are on. WPB will testify to it.**

The production officials have, as everyone knows, been giving manufacturers a chance to go back to original materials for many products (particularly when man-hours could be saved. They have found, however, that many would rather proceed with commodities that once were considered inferior.

And one of the paradoxical situations confronting WPB is that, in a war economy that was supposed to be ravenous for metals, **wood is now so scarce that it has become advisable to release steel to replace lumber for such things as lockers.**



# FIGURES OF THE WEEK

## THE INDEX (see chart below)

### PRODUCTION

	§ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
Steel Ingot Operations (% of capacity).....	99.8	99.4	95.9	97.7	98.3
Production of Automobiles and Trucks.....	15,250	18,000	15,220	19,900	18,620
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$8,039	†\$7,783	\$5,056	\$10,068	\$10,196
Electric Power Output (million kilowatt-hours).....	4,524	4,532	4,337	4,227	3,977
Crude Oil (daily average, 1,000 bbls.).....	4,409	4,389	4,357	4,133	3,826
Bituminous Coal (daily average, 1,000 tons).....	2,108	2,125	1,904	2,025	1,867

### TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	78	76	74	81	70
All Other Carloadings (daily average, 1,000 cars).....	55	54	50	67	47
Money in Circulation (Wednesday series, millions).....	\$20,387	\$20,408	\$20,428	\$17,799	\$15,438
Department Store Sales (change from same week of preceding year).....	+14%	+4%	+22%	+19%	+1%
Business Failures (Dun & Bradstreet, number).....	24	23	25	48	138

### PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	248.4	247.7	247.4	244.1	244.8
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	161.3	161.0	160.7	160.7	157.4
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	220.1	219.2	218.6	209.9	201.8
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.63	\$1.63	\$1.64	\$1.39	\$1.37
Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.).....	20.52¢	20.30¢	19.90¢	20.60¢	20.56¢
Wool Tops (New York, lb.).....	\$1.294	\$1.273	\$1.280	\$1.370	\$1.230
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢

### FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	93.8	94.3	93.3	93.4	83.0
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.74%	3.74%	3.80%	3.81%	4.10%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.74%	2.73%	2.73%	2.68%	2.77%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years)...	2.34%	2.34%	2.34%	2.28%	2.32%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	½-¾%	½-¾%	½-¾%	½-¾%	½-¾%

### BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks.....	34,813	34,862	33,895	33,839	30,052
Total Loans and Investments, reporting member banks.....	50,287	49,892	49,734	46,482	41,591
Commercial and Agricultural Loans, reporting member banks.....	6,369	6,349	6,421	5,628	6,149
Securities Loans, reporting member banks.....	2,133	2,022	1,906	1,371	926
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks...	36,585	36,352	36,109	34,072	28,567
Other Securities Held, reporting member banks.....	2,801	2,777	2,786	2,931	3,286
Excess Reserves, all member banks (Wednesday series).....	1,020	1,120	1,126	1,020	2,094
Total Federal Reserve Credit Outstanding (Wednesday series).....	12,385	†12,419	12,430	8,418	5,992

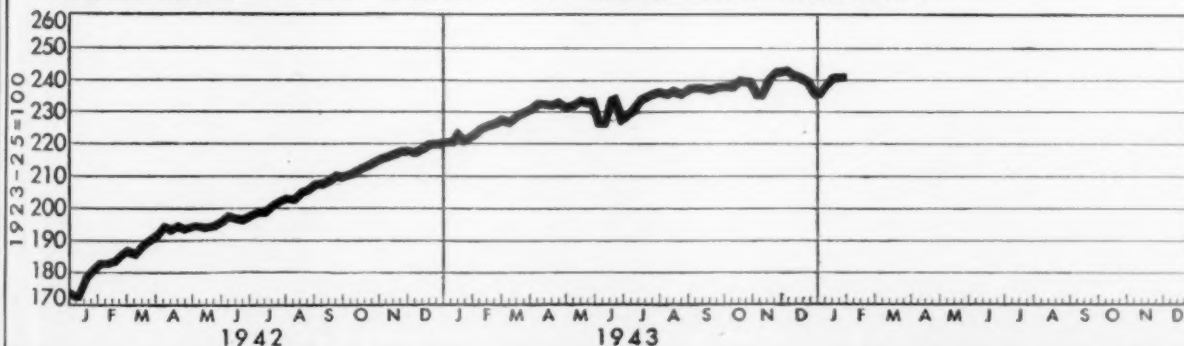
\*Preliminary, week ended January 29th.

† Revised.

‡ Ceiling fixed by government.

§ Date for "Latest Week" on each series on request.

## BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





*Ordinarily, the General Electric Company would regard its 50th Anniversary in an industry as being a cause for celebration, but war products must come first and its immediate aims are devoted to furnishing materiel for the allied nations. Since 1894, beginning with the molding of parts for arc lamps from a mixture of clay and lamp black, and other insulating materials consisting of rubber, asbestos and sulfur combinations, General Electric has played an important and active role in what is often referred to in this year of war as a "new industry." The pioneering spirit which began fifty years ago still exists, and the G.E. plastician\* backed by improved methods, sound engineering and newly developed materials, stands ready to help you solve your problems the G.E. way. G.E. plastics means the best in plastics. Write One Plastics Ave., Pittsfield, Mass.*

**BUY WAR BONDS**

HEAR THE GENERAL ELECTRIC RADIO PROGRAMS: THE G-E "ALL-GIRL ORCHESTRA" SUNDAY 10 P.M. EWT, NBC. "THE WORLD TODAY" NEWS EVERY WEEKDAY 6:45 P.M. EWT, CBS.

FD-261

\* ONE WHO KNOWS PLASTICS.

**GENERAL  ELECTRIC**



## Steel Price Ceiling Faces Test

Labor board takes up wage case next week—and industry already is feeling a cost pinch as volume tapers off; many see need for better price even if pay increase is denied.

Steel is still the bellwether. The industry is now facing problems that will rise to plague all American business in coming months.

First and foremost, labor is making its attack on the wage line first in steel, an attack which comes before the National War Labor Board next week. The industry's case has been handed to NWLB, as expected (BW-Jan. 15 '44, p. 83). Steel company executives contend that higher wages in the industry are impossible without higher prices.

• **Price Pressures Grow**—A steel price rise will affect all war industries. Moreover, cost pressures that have been long accumulating now threaten (combined with changes in production already coming in the war program) to upset the price structure, regardless of wages. These pressures and changes, felt first in steel, later will confront all industry.

Steel prices were frozen in 1941—at 1939 levels. Wages, however, have risen right through the war. In addition to straight-time boosts in 1941 and 1942, overtime premiums, upgrading, and other war labor costs have pushed the average hourly wage from 85¢ in 1940, to 96¢ in 1941, to \$1.06 in 1942, and to \$1.14 in 1943.

• **Some Cost Factors**—Coal has gone from \$1 to \$1.25 a ton in the last year, and iron ore has risen a rough average of 25¢ a ton. These two things combine to raise the cost of producing a ton of pig iron almost \$2. The impact on steel is sharpened by the rise in fuel costs for openhearth, although this is cushioned by the use of fixed-price scrap along with pig.

Another factor that complicates cost figuring is that normal overhead charges have been upset by war production. For example, a rolling mill designed to produce steel strip through a succession of reducing rollers may have been converted to production of heavy steel plate. The conversion means that a number of the stands of rollers must be idle, and that installation of new handling and shearing equipment has been necessary.

• **Conversion and Reconversion**—Although a regular plate mill may cost only \$2,000,000, the continuous strip mill could have cost \$20,000,000, plus

its conversion expenses. So the converted strip mill would have to figure its overhead at \$20,000,000 plus—out of all reason for ordinary plate production.

Looking ahead, the expensive converted mill also faces an expensive reconversion when the time comes to resume large-scale production of thin steel sheets and strip for automobiles and refrigerators.

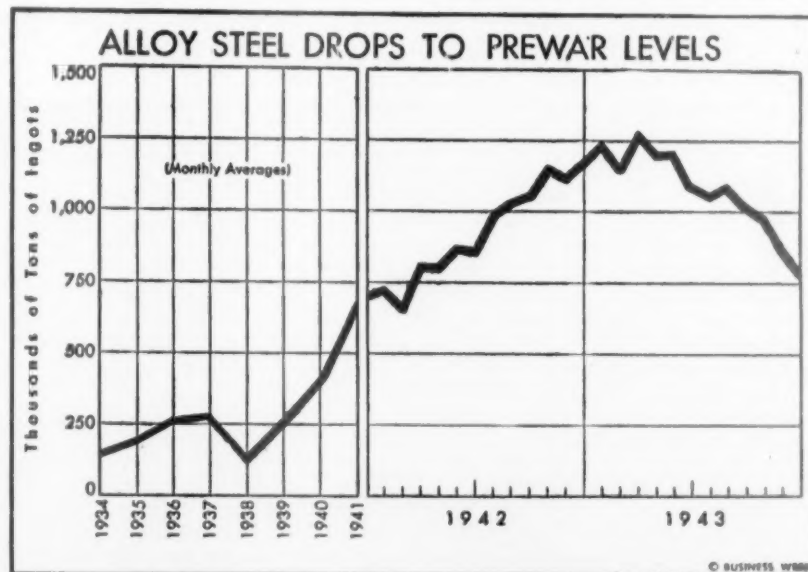
As if to emphasize such wartime costs, U. S. Steel last week announced it had put aside a war bond reconversion fund of \$75,000,000, to pay for wartime costs that would crop up after the war. In addition to reconversion, these costs were described as deferred maintenance and repairs, relocation of facilities, re-

training and re-employing returned service men, and potential losses on raw materials and supplies that would be in surplus after the war.

• **Reduced to Figures**—Some idea of the price squeeze (and it isn't the whole pinch, as will be explained) may be had from some basic figures. Over a ten-year period, production has increased by more than 200%, hourly wages by 80%, average prices of products by only 6%. As compiled by the magazine Steel, here is how the figures stack up:

	Net Tons (Ingots and Castings)	Price Average	Average Hourly Wages
1943.....	88,872,598	\$56.73	113.5¢
1942.....	86,031,931	56.73	105.6
1941.....	82,839,259	56.73	95.9
1940.....	66,982,686	56.68	85.0
1939.....	52,798,714	56.76	84.2
1938.....	31,751,990	59.86	83.0
1937.....	56,636,945	60.82	81.8
1936.....	53,499,999	53.16	66.8
1935.....	38,183,705	53.90	65.5
1934.....	29,181,924	53.43	62.8

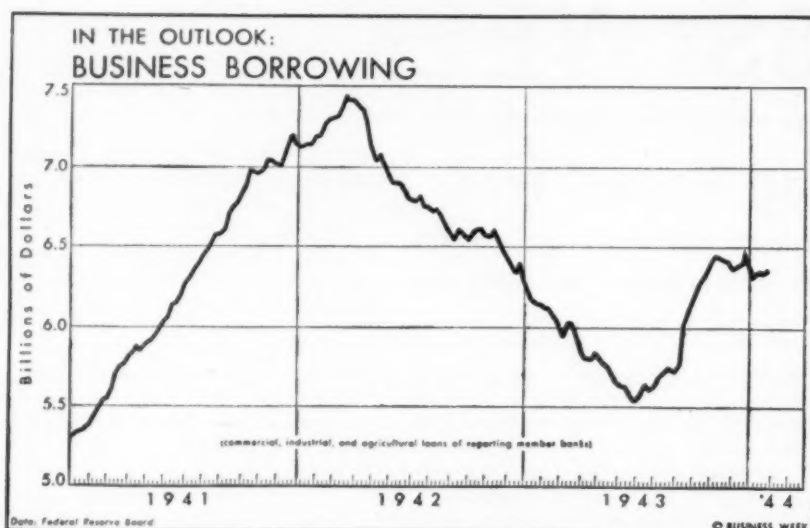
• **Relative Margins**—Profit margins of the steel companies have been affected,



Output of alloy steel has dropped for a peak of over 1,250,000 tons last March to 800,000 tons in December—just slightly above the level at Pearl Harbor. The halving of machine tool output in the last twelve months—as war plant expansion fell off—reduced alloy use, but the big drop came with the cutback in the tank program last year; other needs fell, too. Meanwhile, new electric furnaces, planned earlier

to meet anticipated alloy needs, have been completed, freeing some openhearth to convert from alloy to carbon ingots, but because lean alloys are especially adaptable to openhearth, some new electrics are now standing by. Alloy is relatively more profitable than carbon steel, and the drop in output has pinched steel earnings. Postwar alloy use is apt to remain well above 1936-1937 levels.





Business loans have tapered off in recent weeks, following the sharp July-November rise. They now are almost midway between the 1942 high and the 1943 low. Loans to war plants have been rising consistently; those to distributors have bounced around with their inventories, causing the gyrations of the curve over the last three years. Loans to distributors were liquidated in 1942 and early 1943; then goods were accumulated for Christ-

mas, and inventory values also began to be lifted by the shift from low-end merchandise to high-price lines; finally holiday sales and clearances cut inventories again. Expectations are that demobilization financing—for reconversion, new inventories, swelling consumer credit, etc.—will raise business borrowings above the 1942 high—provided always that federal finance doesn't squeeze the money markets (BW—Jan. 22 '44, p. 112).

too, by price factors hidden in the fixed level of average prices. Some specialty items return relatively more profit than standard steels; such peacetime specialties as strip have been cut down, and those which at first replaced them, such as alloys, have in recent months been curtailed (chart, page 15).

• **Volume and Profits**—Any industry—and steel is a conspicuous example—can make up for a lot of cost increases if it can get enough volume. Right now, however, steel is face to face with declining operations.

Before the war, steel mills figured they had sufficient volume to take care of overhead when production was 45% to 50% of rated capacity. However, as steel-making costs have gone up, and selling prices have held steady, the break-even point has moved up. Instead of 50%, the break-even point has moved up and up, to as high as 80% of capacity for many plants.

• **Statistical Pitfall**—Although current operations are reported close to 100% of capacity, new furnaces have been completed since July 1, 1943. Thus the base for the capacity computation has been altered, and actual operations,

in relation to facilities now usable, are about 96% (chart on cover).

In general, the war program now calls for increased production of aircraft, signal equipment, and similar items—which use little steel—but for reduced output of ordnance, ammunition, etc.—which have been using a great deal. So, though the arms program is holding up on an all-over basis, its total steel requirements are easing.

• **Some, But Not Much**—More steel is being allotted for rails, farm machines, and other essential equipment. But the most important items as far as civilian heavy goods are concerned (the strip and sheet that go into refrigerators, office furnishings, automobiles) are not available because of need for ship plate. In general, Washington is holding back until successful invasion assures that no sudden jump in munition output will be required.

These changes in the parts of the pattern show clearly enough why the steel rate is sagging. It might be lower still if it were not for the fact that production lost over the holidays and in the strike has to be made up.

• **How Low Will It Go?**—Some steel men predict that the rate will drop to

85% of capacity in the second quarter of 1944. Later, they figure that war manufacturers facing cutbacks will use up any excess inventory, further cutting orders placed with the mills. Then there is the probability of a further drop in operations during demobilization and reconversion.

Thus operations are sliding toward the red ink level for the industry as a whole (below the break-even point for many products) without any consideration of a higher wage bill. Overhead must be spread over fewer units, and wartime costs are growing more and more burdensome.

• **Lid Still Held On**—The steel companies, nevertheless, are making money right now—on shipbuilding and ordnance. If wages aren't advanced, the Washington price authorities will be slow to act on lifting ceilings—until war work and earnings drop.

In all these respects, what's happening to steel typifies the problems that will grow for war-and-peace industries generally.

Time is of the essence in the whole steel picture. Invasion timing will affect volume, as indicated. Labor's timing, to take advantage of its strong position now and yet not to overplay its strike hand, is likewise important. The steel cost picture being what it is, these two factors will determine the when as well as the whether of a price jump.

## M. of M. Defied

Shipbuilding Commission reports 12,000 of 46,000 Federal ship-workers stopped paying C.I.O. dues despite clause.

Dramatic evidence that maintenance of union membership without a check-off of union dues is plaguing union leaders is provided by the Shipbuilding Commission of the National War Labor Board, which revealed this week that 12,000 members of the C.I.O. Industrial Union of Marine Shipbuilding Workers at the Kearny and Port Newark (N. J.) yards of the Federal Shipbuilding & Drydock Co. fell behind in their dues under the union-maintenance clause ordered by NWLB in May, 1942.

• **Failed to Act**—These 12,000 became a torment to the union when the commission ordered the maintenance clause renewed, with a 15-day "escape clause," last Sept. 15. The delinquents, under suspension by the union, allowed the 15 days to pass without indicating whether they wanted to remain in or quit the union.

The company argued that they ex-



expressed themselves by failing to pay their dues, but the union insisted that they were still union members, even though suspended, and hence were subject to the new maintenance clause. The two wards employ 46,000 workers.

The new clause was coupled with a union dues checkoff granted the union to soften the commission's refusal to turn the maintenance clause into a union shop provision.

• **Must Resign in Writing**—The commission has settled the dispute by directing the company to send letters to the 12,000 delinquents giving them the choice of formally resigning in writing from the union or doing nothing, thereby going automatically under the new dues checkoff.

In either case, the men were directed to pay dues back to September, 1943, on the assumption that they were subject to dismissal up to that time for having failed to remain in good standing. However, the commission directed the employees to settle with the union, specifying that it was not making the giant U. S. Steel Corp. subsidiary a "bill collector" for the union. The union probably will make a compromise settlement with the delinquents.

• **Subject to Test**—The union got into the mess because of its failure to press for discharge of the delinquent members during the early days of the first contract. In November, 1942, the union submitted a "test list" of 180 names for discharge to an arbitrator, but the arbitrator did not act until August, 1943, after the list dwindled down to six by virtue of reinstatements, quits, inductions, etc.

Said William E. Simkin, commission chairman:

"What would have been a minor problem in its earlier stages has snowballed to the extent that the union now reports some 12,000 delinquents under the 1942 agreement as of September, 1943, the date of the Shipbuilding Commission's directive order on union security for the new agreement. . . .

"In the instant case the union, and labor members of the commission (who dissented), believed that these employees should be brought under the checkoff automatically. The public members could not support this position because it is certain that at least some of these employees honestly believed their delinquency was equivalent to resignation. To force them back into the union now would be contrary to our position in providing an escape clause in the Sept. 15 order."

• **Routine Policy**—The original May, 1942, maintenance order did not contain the escape clause which later was applied by NWLB as a matter of routine policy to practically all cases.

## Battle for Alcohol

WPB fight to get alky for war involves many conflicting interests. No holiday, but a new demand for grain plants.

Since more grain alcohol must go into rubber for tires and less into the spirituous bounce of cocktails, there is little or no chance that distillers will be allowed any holiday from war alcohol production to permit them to make beverage liquors during 1944. This was the gloomy portent of last week's report on alcohol by Donald M. Nelson, chairman of the War Production Board.

• **How It Was Documented**—The bad news was illustrated in the report by a table classifying the yearly demand (100-proof alcohol; millions of gallons):

	1942	1943	1944
Direct military .....	52	43	48
Lend-lease .....	25	68	59
Synthetic rubber .....	..	127	328
Indirect military & civilian	120	146	165
Antifreeze .....	29	49	32
Total .....	226	433	632

• **Oil Shouldered Out**—Most striking is the big bulge in the amount needed for synthetic rubber. It reduces to cold figures the fact that alcohol is now the hero in synthetic rubber production,

having been promoted to that status when the plan to use petroleum derivatives failed to make the grade. Alcohol now carries three-fourths of the rubber program, will continue to dominate it.

Insiders trace between the lines of the report the complicated story of how the Cubans cleaned up on gins and rums when American negotiators failed to meet their terms for blackstrap, how the liquor industry escaped having competitive capacity built by government funds, how the farm bloc was stymied in its attempt to have numerous new distilleries erected, and how this blockade threatens to backfire now that the demand for new grain distilling capacity has again become insistent.

• **Stocks Are Down**—The bald facts of the present crisis are that only 593,000,000 gal. of production are available to meet the need for 632,000,000 gal. There remains a 39,000,000-gal. deficit that must be taken from the stockpile. Nelson revealed that the government stockpile dropped from 138,000,000 gal. last July to 80,000,000 gal. at the beginning of 1944. By the end of this year, the figure will be around 41,000,000 gal. (after the estimated deficit is met). That is a dangerously thin margin since a working inventory of 30,000,000 gal. is considered the absolute minimum for rubber plants, powder plants, arsenals, and lend-lease.

At a recent conference with the industry, the WPB proposed to increase



While distillers produce only industrial alcohol, the racketeers are having a heyday. To help stamp out bootlegging and resultant tax losses, the Treasury Dept. launches a drive (above) to warn the public away from bottled

stuff with questionable labels and seals, and black market prices. Meanwhile, Cuban and Mexican gin is being checked at points of entry, to determine chemical contents, and processing standards.



# JOHN ALESSI: CITIZEN AT WAR

Philip Murray and his Congress of Industrial Organizations have figures showing how hard the rising cost of living has hit the workingman (page 94). Last week, presenting C.I.O.'s case to the Senate committee investigating the special plight of the white-collar and other fixed-income workers, Murray brought those figures to life in the person of one John Alessi, truck driver for the New York City Dept. of Sanitation and member of C.I.O.'s State, County & Municipal Workers Union.

Alessi's story was important—to the senators and to his fellow union members—because he spoke as one who had a right to the title of Mr. Average Man. In what he had to say, he testified not only as a typical voter and a typical union man but also as a typical consumer—the man to whom business has to sell its goods, one of the 15,000,000 people whose pay checks have been virtually frozen, whose buying power has been clipped by the price advance.

Alessi makes \$2,320 a year, on which he supports himself, his wife, twin daughters (age 13), and a son (age 11). That \$2,320 includes a wage boost of \$100 he got recently but for which he has to work Sundays. "We were getting paid for one Sunday a month, which was twelve Sundays a year, which was equivalent to \$84. So he gave us \$100. So the net gain was \$16."

Alessi is in debt, has been that way most of his adult life. "Ninety thousand of the city's 168,000 employees are in hock up to their ears." It all began when Alessi could find only

work as an extra; he piled up a \$600 debt.

"Up until today I'm still in debt that same \$600. It seems when I get to a certain extent that something happens which makes it accumulate odd bills. I'm going to give you some instances. Now, I got married when I was made a regular man.

"I said, 'Wait a while and see if I can peel off these debts.' She said, 'I'll work a while and maybe on both salaries we'll catch up.' So it happened that way. I cut it down to about \$200 and then she was in a family way and from then on my troubles began all over again. I had twins. So after my work, I came home, came in the door and they congratulated me and said, 'You've got twins.' I almost collapsed. Well, those twins were born and cost a lot of money.

"Then of course little odds and ends came—the boy, etc. I want to impress upon you gentlemen that I haven't been able to replace one piece of furniture that I bought since I married. I had to turn my bed over to my children because it's too weak to hold me and my wife. We had to wire the legs together, and I'd like to extend the invitation for you gentlemen to come up to my home and see that bed wired up."

The upshot of Alessi's continuing travail is that his spendable income is a lot less than his salary. "I'm supposed to be making \$2,320 which I don't get. First thing there is deducted \$4.02 pension" a week. Actually, of that money only \$2.11 is for pension, and \$1.91 for payment on debt representing borrowed funds.

"Then there is \$3.78 deducted for garnisheeing, which is 10% of my salary. . . . I pay only \$1.00 a week in Victory tax. I pay only \$1.00 a week for bonds, because that is all I can afford, and in

fact I cannot even afford to spend the \$1.00 a week for bonds. In fact, only recently I had to dispose of the three bonds I was able to accumulate to have my children have a little Christmas cheer, and I can assure you that it wasn't spent on toys but clothing and such. Now my basic pay that I take home reads like this: \$31.51. Out of that I need \$6.00 for my maintenance on my job—20¢ carfare, 17¢ for a pack of cigarettes, a bowl of soup which is 15¢, a cup of coffee is a nickel. A piece of pie. That's another dime. . . .

And so it goes. Other big items in the Alessi budget are rent, \$38 a month ("The landlord takes \$8 off, because he lets my wife take care of the furnace."); insurance, \$2 a week (on a \$1,000 policy for him and \$500 each for his wife and children to cover burial expenses); medical and dental care (85 out of 100 department men are sick in the course of a year); and food—the big, tough impendable in life at the Alessi's today.

"I want to bring out one specific point which my wife told me three weeks ago. She said, 'Well, Dad, I went to the butcher and look what I got for \$3.45.' This is what was there: about a pound and a quarter of a cutlet, about a pound of chop meat, and a little piece of pork which we would say, after you trim the fat off it, if it comes to a snowball, you have a lot of meat. That cost my wife \$3.45. Now that dinner had to last us Saturday and Sunday for a family of five. Gentlemen, I want to ask you is that enough food for a wife and three children?"

The committee thanked Mr. Alessi for his testimony, complimented him on its documentation and presentation.



The witness . . .



His family . . .



And their home in Brooklyn



production by using more food materials for alcohol distillation. It asked (1) 100,000 tons of sugar and 170,000,000 bu. of grain, or (2) 1,500,000 tons of sugar and 130,000,000 bu. of grain. The War Food Administration would only agree to allow the minimums—100,000 tons of sugar and 13,000,000 bu. of grain.

Reply of the WPB was, in effect: "All right. We'll have to go ahead with new plants to get alcohol from petroleum and wood wastes."

• **Plants to Be Pushed**—The Nelson report announced that the WPB would hurry completion of three grain alcohol plants (at Omaha, Kansas City, and Muscatine, Iowa) now under construction. These plants have a combined capacity of 40,000,000 gal., only 6% of the total 1944 alcohol program.

Farm spokesmen protest that the WPB officials in charge of alcohol have never seriously considered large-scale construction of grain alcohol plants. The three now being built are all that remain of the ten mentioned (to quiet the opposition) late in 1942. Two new plants were promised to the farm co-ops (BW—Apr. 17 '43, p. 32), but they have been abandoned. WPB contended that existing industrial alcohol and whisky plants were adequate for all demands.

• **More Plants Needed**—It is now admitted that additional plants are needed, but WPB still says they can't use grain because the WFA won't release necessary supplies. In charge of the alcohol program for WPB is Dr. Walter G. Whitman. He was for many years with Standard Oil of New Jersey, which was until recently associated with National Distillers in the Standard Alcohol Co., patent holder on a synthetic alcohol process. Whitman is an enthusiastic advocate of synthetic alcohol from petroleum byproducts.

• **Sulphite Plant Approved**—Maintaining its avoidance of food materials, the WPB has approved plans for a plant on Puget Sound to make alcohol from sulphite liquor, a pulp plant waste. It would use a process employed by the Chicago Tribune at Thorold, Ont. (BW—Jun. 26 '43, p. 94). The WPB also is considering alcohol production from wood sugar, derived from sawdust and shavings (BW—Dec. 4 '43, p. 60).

Comparatively little alcohol can be drawn from these sources. As long as sugar and grains are barred, the only remaining source of importance is petroleum. Whitman has been urging on WPB consideration of plants to make alcohol from petroleum gases. Critics say that such plants would take two years to build, and would cost three times as much as grain alcohol plants.

• **Dangerous Competition**—Should the plants making synthetic alcohol from

petroleum wastes get going, the established industrial alcohol interests would ultimately have dangerous competition on their hands. The synthetic plants, once built, could (as long as petroleum supplies lasted) outstrip grain distillates both in volume and in low production cost.

In the early days of the war effort, molasses dominated the alcohol picture, and everyone but midwestern farmers was happy. First chief of the Alcohol Section (1941) was Fraser M. Moffat, Jr., who was a vice-president of U. S. Industrial Chemicals, Inc., a leading producer of industrial alkyl from molasses, with a subsidiary—Cuba Distilling Co.—which is a major factor in Caribbean molasses. His program naturally was based principally on molasses, called for only about 25% of whisky distilling production. In accord with this plan, Uncle Sam bought the entire 1942 Cuban output of blackstrap molasses (sugar residue). The wartime price was 13.6¢ per gal., up from a prewar normal of less than 5¢. Moffat also arranged the diversion of 1,000,000 tons of Cuban sugar into industrial alcohol.

• **Tanker Sunk**—But Moffat encountered a barrage of brickbats and dead cats when the attack at Pearl Harbor was followed by the sinking of numerous molasses tankers, and sugar rationing was

clamped down on a self-indulgent public. Leader of the midwestern clamor was Sen. Guy M. Gillette of Iowa. He demanded grain alcohol plants for the Farm Belt to relieve the strain on domestic sugar bowls and tankers.

Moffat withstood the demand for new plants, undertook the conversion of molasses plants (including those of his own company) to the use of grain. Meanwhile, M. J. MacNamara, vice-president of National Distillers, became special consultant to the WPB Alcohol Section on a dollar-a-year basis.

• **Whisky Plants Converted**—Under MacNamara the whisky industry was converted entirely to grain alcohol production for war, and whisky making ceased on Oct. 8, 1942. Moffat and MacNamara accomplished the herculean task of increasing production 500% from the prewar production of about 100,000,000 gal. annually. At the same time, they only increased capacity 40%.

• **Farmers Are Angry**—However, farm interests have been hollering their heads off about the maneuvers involved in this achievement. They point out that conversion has prevented the building of plants that would have given them a postwar toehold on the industrial alcohol business.

Once war uses were over, the extra plants would have furnished justifica-

## Battening the Hatches for a Storm

To avoid the débâcle that engulfed our merchant marine after the last war, the U. S. shipping industry has formed a united front in the National Federation of American Shipping, headed by Almon E. Roth. He will resign as alternate industry member of the National War Labor Board and take leave of absence as president of the San Francisco Employers' Council (BW—Oct. 26 '40, p. 39).

In the union are the American Merchant Marine Institute, and the Assn. of American Steamship Owners (East Coast); the Pacific American Steamship Assn., the Shipowners Assn. of the Pacific Coast, and the Pacific American Tankship Assn.

Roughly paralleling in scope and purpose its possible future adversary—the General Council for British Shipping—the new federation will seek common agreement on knotty postwar shipping problems: the size of the postwar merchant marine; the terms on which government-owned tonnage (estimated to reach 40,000,000 to 50,000,000 at war's end) will be sold to private industry; possible



disposition of excess tonnage to foreign nations; modernization of existing vessels and acquisition of new ones; participation by U. S. flag companies in overseas air transportation.

A suave strategist, Roth once headed the Pacific American Shipowners Assn. and was first president of the Waterfront Employers Assn.



## RUM IMPORTS SOAR

Year-end statistics on imports of distilled spirits, just released by the Treasury Dept., illustrate how great is the flood of West Indian gin and rum supplies that now decorate the shelves of the nation's liquor stores. The figures, which are based on sales of tax stamps, show total imports of 32,660,000 tax gallons of distilled spirits last year, as compared with only 13,784,000 in 1942. In December, the peak month, they amounted to 5,185,000 gal. against 1,523,000 gal. in December, 1942.

The Treasury does not break down the figures by country of origin, except for the U. S. possession of Puerto Rico. However in peacetime, a large part of such imports consisted of whisky from the British Isles. Presumably these have not increased markedly during the past year. Therefore, it would appear that 1943's increase is accounted for almost entirely by West Indian spirits. This conclusion is supported by the figures on Puerto Rico, which show 1943 imports of 6,383,000 gal. against only 2,719,000 gal. for 1942.

tion for a large-scale subsidized farm alcohol program and a vast new market for farm products.

• **Snagged by WPB**—Were such grain alcohol plants built by the government, the farmers knew they could swing enough political weight after the war to keep production going via subsidies. That hope is still blocked by WPB.

The farmers see nothing to do but wait for the decline of petroleum reserves to the point where alcohol will be needed or for the development of new processes that will cut the cost of grain alcohol.

• **Critics Get Personal**—The farm critics of the MacNamara accomplishment get more "personal" in their comment that the conversion from whisky to alcohol prevented the building of extra distilling capacity (with federal financing) which might seriously have competed with both the industrial alcohol and the whisky industries after the war.

They add that all the big distillers with heavy stocks, notably National Distillers, stood to profit by a shutdown on whisky production (BW—Apr. 24 '43, p32). And they are further upset by the fact that one of the three new grain alcohol plants is being built by Sander-son & Porter, engineering firm of National Distillers' president, Seton Por-

ter, and that the plant will be operated by National Distillers.

• **Economy and Speed Stressed**—WPB had sound arguments for conversion of the whisky plants. It claimed this was the quickest and cheapest course and required a minimum of government money and new materials. Agency men discount the contention of new plant advocates that the government had to make large investments for conversion.

• **Effortless Cleanup**—Regardless of the controversy, the whisky companies with big stocks have cleaned up as a result of the shutdown on whisky production. They are selling whatever they care to bottle, under their best brand names, at long profits, with no sales effort. The stampede to buy up companies with stocks was an inevitable development (BW—Apr. 24 '43, p32).

The companies hurt (biggest is Seagram) are the liquor concerns which depended on alcohol spirits which did not have to be stored and aged. They have found substitutes in high-proof California brandies, Cuban alcohol, gin, rum, and wine. In any event, there has been no united industry front demanding a holiday for beverage liquor production because of the division of interest between those who have stocks and those who don't.

Meanwhile, WPB stands pat.

Nelson made clear the WPB attitude when he reported last week, "To meet the [war] goals of 1944 will require full usage of all facilities for industrial alcohol production, including beverage alcohol plants."

• **WFA Blamed**—The official story—and there are many unofficial ones—is that the whisky production vacation (BW—Sep. 11 '43, p80) scheduled for last fall was called off because of War Food Administration objections.

With Washington calling for record production of cattle, pigs, and chickens, feeders are in no mood to see more grain diverted to alcohol. They maintain their opposition even though it is shown that the present grain alcohol program requires less than 5% of the total grain supply (full-scale whisky production would require less than 1%) and that more than a fourth of the tonnage is recovered from the distilling process in the form of dried grains which make valuable feeds.

• **The Question Mark**—Cuban molasses is the big question mark in Nelson's discussion of greater production. Negotiations are under way with a view to importing more sugar and blackstrap for alcohol purposes. Last year the Defense Supplies Corp. booted a chance to get needed Cuban supplies by haggling too long over prices (BW—Dec. 18 '43, p19). Soon thereafter the Cubans learned they could get much more for their product

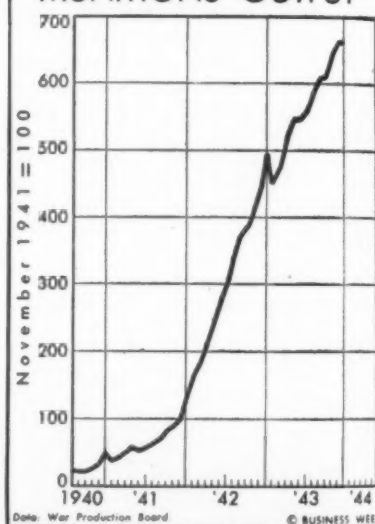
in the form of rum or gin, and they proceeded to do so.

Another suggestion for bolstering domestic supplies is a reduction in lease shipments. From 25,000,000 gal. to 50,000,000 gal. yearly have been going to Russia and England. The Nelson report shows that much of this could be conserved if the British would make full use of their own distilling facilities. A new plan is to ship Caribbean molasses to England for this purpose. It also is pointed out by others that Britain might distill a portion of Canada's wheat surplus.

And it has been suggested that grain alcohol supplies might be stretched by substitution of other forms where possible—as in antifreeze solutions, which took 49,000,000 gal. of alcohol last year. Wood alcohol, which can be made synthetically in ordnance plants now idle, would be an acceptable and inexpensive substitute.

• **Government's Problem**—Such matters must be solved by the government. They are not a problem of the liquor industry. The companies with sufficient stocks aren't worrying yet about empty warehouses. But they are worried about an ominous move in their direction by the

## MUNITIONS OUTPUT



Due to holiday and influenza absences, December munitions output was unchanged from November; aircraft and signal equipment were up, other categories down. Officially, "the December rate is close to the average schedule for 1944"; so we are at or near the peak to be hit in the next few months; even the 1943 gain was much less than in 1942. Until after invasion, the munitions job is to push aircraft, landing barges, trucks, and radar.



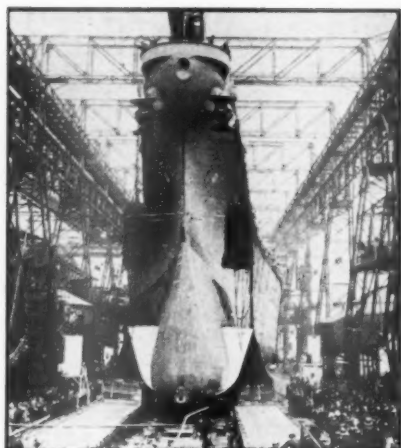
they pro  
 Dept. of Justice (BW—Aug. 14 '43, p. 99).  
 the first of this month, the D. of J.  
 in its files the recent corporate  
 history of 89 firms in the hard liquor  
 business including the Big Four—Sea-  
 son, Schenley, National, Hiram  
 Walker. Included are records pertaining  
 to acquisition of rival distilleries, pur-  
 chases of bulk whiskies and spirits,  
 changes in brands, container sizes, and  
 prices since Jan. 1, 1939.

To the antitrust bloodhounds, the  
 trail seems so obvious they can follow  
 with their eyes shut. They point out  
 that production was restricted, thereby  
 greatly enhancing the value of stocks  
 held mostly by the big companies. Sales  
 of such stocks left the companies with  
 funds which were used to acquire com-  
 peting concerns. Distribution was dras-  
 tically restricted, through rationing.

• **Prices Held, But**—The Office of Price  
 Administration imposed price ceilings  
 which prevented full exploitation of this  
 situation. But OPA did not prevent  
 withdrawal of low-priced, low-profit  
 brands in favor of high-cost, high-profit  
 brands. Nor did OPA prevent a flood of  
 new brands which it is alleged were in-  
 tended to duck price controls.

The distillers will contend that every  
 step they took was forced by WPB ac-  
 tions or orders. Production was cut and  
 finally discontinued to make way for  
 war alcohol. Rationing restrictions by  
 the companies then became necessary if  
 they were to stay in business. WPB  
 also restricted their use of bottles.

• **WPB Rulings Cited**—As for the with-  
 drawal of cheap brands and the launch-  
 ing of new ones—the practices were al-  
 lowed under the rulings, and the policy  
 became simply a question of good sales  
 management. Since the distillers merely  
 protected their stockholders by taking  
 advantage of situations created by the  
 WPB, they don't see how they can be  
 yanked off the street on a charge of con-  
 spiracy in restraint of trade



## DISTANT SPECTATORS

Admission to the Brooklyn Navy Yard  
 launching of the U.S.S. Missouri, the  
 Navy's newest battlewagon, was by in-  
 vitation only—but television provided  
 grandstand seats for General Electric

workers at Schenectady who helped  
 build turbines and electrical equip-  
 ment for the 45,000-ton ship. The  
 scene, piped from New York to Sche-  
 nectady, was retelecast from G.E.'s  
 station WRGB for receivers in the  
 shops and others in the area.

most profitably and thus traditionally  
 command a better price when markets  
 are uncontrolled. The protected bracket  
 was moved up some weeks ago to in-  
 clude 200-lb. to 300-lb. hogs (BW—  
 Jan. 8 '44, p. 36) when packers showed a  
 tendency to skip animals in the official  
 weights, and concentrated on buying, at  
 prices much less than ceilings, hogs just  
 below and above the limits.

Last week, because packers had  
 merely shifted their heavy-hog purchases  
 to weights above 300 lb., and were pay-  
 ing \$1 per cwt. below the floor, the floor  
 weight limit was raised again, this time  
 to 330 lb.

• **They Are Unhappy**—No farmer wants  
 to sell his hogs for less than the govern-  
 ment guarantee. But, once his hogs are  
 ready for market, he wants above all else  
 to sell them. Hence, middle western  
 farmers are unhappy that the packers  
 promptly ceased buying 300-lb. to 330-  
 lb. hogs and concentrated on weights  
 100 lb. lower. By midweek the 300-  
 330's unsold at Chicago had reached  
 1,500, and the total was climbing daily.

By ever-increasing controls, Washing-  
 ton has thus elbowed hog buyers into  
 doing what it has all along wanted them  
 to do. They are now paying floor prices  
 for best hogs, but if this tactical tri-  
 umph makes 300-lb. to 330-lb. hogs un-  
 salable during the glut, its cost may be  
 more than farmers can afford.

• **Permit System**—Another control was  
 applied last week at Chicago, biggest  
 hog center of all. The marketing com-  
 mittee of commission dealers, with  
 Washington approval, imposed upon

hog shipments a quota-and-permit  
 mechanism intended to avoid disastrous  
 oversupplies.

Now, when a farmer wants to ship a  
 load of hogs, he telephones the com-  
 mission man who handles his livestock.  
 The commission man has a quota equal  
 to his 1943 January-November average  
 volume, and is free to assign to his ship-  
 pers permits up to this number of head.

Essentially the same method has al-  
 ready been tried out at Sioux City and  
 South St. Paul, as well as at many small  
 concentration yards. Between 5% and  
 10% of nonquota hogs reached Chicago  
 last week from uninformed or optimistic  
 farmers, and these shipments were sand-  
 wiched in by the commission men usu-  
 ally after two or three days' delay.

• **Losses Are Low**—Hogs remaining un-  
 sold "in first hands" continue numerous  
 at most big slaughter points. Even Chi-  
 cago, after three days of operation under  
 the permit plan, carried over 13,000  
 head, as compared with 25,000 a week  
 earlier.

Losses to farmers have been astonish-  
 ingly low. Sen. Hugh Butler made  
 Washington headlines by asserting that  
 thousands of holdover hogs at the  
 Omaha stockyards had died during a re-  
 cent week end, but the yards' company  
 says the actual figure was 183. Death  
 loss of hogs held over at Chicago this  
 year has averaged less than one per  
 1,000, no worse than if the animals had  
 remained in the country.

• **Close to Capacity**—December pork  
 production under federal inspection to-  
 taled 1,050,000,000 lb., with January

## New Hog Rules

WFA raises floor weight  
 limit again, thus elbows buyers  
 into taking best hogs. But this  
 increases glut of heavies.

Struggling to prevent the nation-wide  
 flood of hogs from breaking through  
 the official price floor, the War Food  
 Administration has superimposed fur-  
 ther complications on markets already  
 bewildered by the suspension of supply-  
 and-demand economics.

• **Limits Are Raised**—The original gov-  
 ernment guarantee covered 200-lb. to  
 270-lb. hogs, the weights that kill out



totals heading for a considerably higher figure. Uninspected slaughter averages 50% of inspected, bringing the month's pork total to about a billion and a half. This represents close to the nation's effective slaughter capacity.

Chicago experience indicates that local weekly capacity is theoretically about 200,000 head, but that while this may be reached occasionally, it cannot be maintained. Nation-wide hog slaughter in the week ending Jan. 15 reached 1,871,000 head, yielding 269,000,000 lb. of pork exclusive of lard.

• **More Storage Space**—Washington reported that more cold storage space is available than a few weeks ago; few major packers had noticed any easing. WFA claims it has made enough additional freezer space available for a half billion pounds, but this is little more than a week's total output. Official estimate of 1944 meat production is 24,500,000,000 lb.

• **Drop Due in April**—Hog slaughter in normal years tapers off about mid-January, but this is another year. The trade is guessing that a slowdown will begin gradually about mid-February, and that the first real drop in pork supply will be felt about April. By the end of last week, the carryover shrank to 3,000 overnight, and Monday night of this week, it was 11,000.

## No Men to Spare

Lowell, Mass., long used to unemployment, had a war boom till cutbacks came; now it fights to keep labor in postwar pool.

As far back as anyone in Lowell, Mass., can remember, the city has always had an unemployment problem. Before it lost its textile manufacturing supremacy, there were periods when unemployment wasn't too serious. Since then, however, it has had, next to Boston, Massachusetts' biggest WPA roll and largest civil service list.

• **Boom Didn't Last**—When the war production program got under way, Washington planners made Lowell, with its idle labor, an ordnance center. The city boomed, even though it has never got out of the Group IV labor surplus category in the War Manpower Commission's listing.

Came the cutback phase of the war, and Lowell's contracts for 50-caliber ammunition were among the first to be cut. Other contracts weren't forthcoming. Yet Lowell business interests refuse to give up; instead they are making a fight to stave off a present and postwar col-

lapse. Convinced that the town's big asset is its labor supply, the fight is concentrated on holding workers in Lowell.

• **Competition for Labor**—On Nov. 20 Lowell's daily Sun carried the news that the Army would close, by Dec. 31, its two Lowell ammunition plants (under Remington Arms Co.), but three days later, the newspaper splashed headlines announcing that U.S. Rubber Co. would employ 1,500 workers in Lowell "possibly within three weeks." Mayor Joseph J. Sweeney, complaining that labor recruiting campaign by the New Departure Co., Bristol, Conn., was draining workers from Lowell, sought the aid of Representative Edith Nourse Rogers. The mayor's industrial postwar committee announced that local industries needed 1,590 workers immediately and a total of 6,019 to "run full."

Meantime, New Departure was blasting Lowell—in newspaper advertisements, from billboards and banners, by radio, public address trucks, and placards—urging workers to come to Bristol to make critically needed ball bearings. The U.S. Employment Service was co-operating in New Departure's campaign.

• **Fight Gets Up Steam**—Until the promise of the U.S. Rubber plant made it unnecessary, the Lowell Sun offered to foot the bill for full-page ads promoting home-town attractions in the Boston

## Reconversion: Signposts on the Road Back

The War Production Board's reconversion activities have wilted as a result of its accession to the military's demand that they be held in abeyance until after the invasion of Europe (BW—Jan. 15 '44, p. 7). Long-term reconversion programing and immediate stimulation of certain essential civilian lines, misnamed reconversion, have come to a standstill.

Programs for producing a limited number of washing machines and refrigerators for essential civilian use, beginning in the second quarter, are an example. These were ready for presentation to the Requirements Committee. Presentation now would merely bring an automatic refusal.

• **Whiteside Leaving Early**—The Office of Civilian Requirements has probably been hit harder by the sit-tight policy than any other segment of WPB, because it has the biggest stake in reconversion. This is one reason for the sudden resignation of OCR's boss, Arthur D. Whiteside.

It was reported several weeks ago that Whiteside was quitting, but under pressure, he had agreed to stay on for a few months more (BW—Jan. 8

'44, p. 5). Now he is leaving in less than a fortnight. Two or three of OCR's top men will follow him out.

Some of Whiteside's friends believe it is significant that his departure came only a few days after Charles E. Wilson, WPB's executive vice-chairman, agreed—under presidential pressure—to stay on for another six months (BW—Jan. 8 '44, p. 5). Increasingly, Wilson and Whiteside have been unable to see eye-to-eye.

It will be hard to find a new boss for OCR. One line of thinking is that—if the office grows in scope and authority as reconversion progresses—WPB Chairman Donald M. Nelson will take its management into his own hands.

• **"Dynamic Planning"**—As a fill-in for this period of "watchful waiting," officials are talking about something they call "dynamic planning." This means starting WPB's industry divisions on the collection of information as to the materials and manpower that would be required for specific reconversion programs, on the models to be produced, the minimum production runs needed to

make a switchover worth while, the plants to be brought in.

If these ideas were adopted, the Requirements Committee might approve programs in principle long before they were put into effect. This approval might even extend to actual allocation and stockpiling of materials. But there would be no public announcement which might be considered detrimental to morale, no lifting of production controls.

• **Syracuse Tryout**—Another well-thought-of scheme is to provide WPB liaison for joint industry planning in cities and regions to determine where reconversion could start first, where labor released from war work could best be absorbed. Syracuse, N. Y., has been suggested as a test tube, principally because it has a wide variety of noncompetitive industries (for example, one air-conditioning manufacturer, one typewriter firm, one pottery, one shoe company, one washing machine maker).

The program for limited resumption of civilian production in small plants in selected areas (BW—Jan. 22 '44, p. 18) is another gap-bridger.



"Unforeseen events . . . need not change and shape the course of man's affairs"



## EVENING CLOTHES

THESE are the evening clothes of someone you might know . . . a business acquaintance.

By day . . . he serves in your interest, guarding against unforeseen events that might bring harm to you. After business hours, he serves in his country's interest—which also is yours.

He is an insurance agent.

Tonight, after a hard day's work, he'd like to relax. But he won't. He'll take on a tough night shift in a war plant. Rest and sleep can wait.

Since Pearl Harbor, thousands of insurance people—all over the country—have willingly

given their spare time to turn out the ships, the planes and the guns that will mean victory. In countless ways, others on the home front are giving unsparingly to the war effort.

And there are many more thousands who are working full time for you and their country. Their work suit is a uniform of the Army, Navy, Marines, the Coast Guard.

Yet, their job is still insuring. Insuring the precious liberty that is the personal property of every man, woman and child in America. Maryland Casualty Company, Baltimore.

# THE MARYLAND

Practically every form of Casualty Insurance and Surety Bond, for business, industry and the home, through 10,000 agents and brokers.



Contact **KAYDON** of Muskegon

*For Unusually Large,  
High Precision Bearings*

## BALL and ROLLER BEARINGS

*Standard and Special*

FROM 6" INSIDE DIAMETER TO 100" OUTSIDE DIAMETER  
COMMERCIAL FINISH OR ULTRA-PRECISION

Radial Ball Bearings • Thrust Ball Bearings • Radial Roller Bearings

Thrust Roller Bearings • Taper Roller Bearings

*Nonrigid or Self-aligning • Extra Heavy Duty or Special Light Type*

LIGHT WEIGHT NON-METALLIC CAGES OR STANDARD BRONZE TYPE

★ *Early Delivery* ★

*Also any type of*

## PRECISION MACHINE WORK OR GRINDING

*to unusual accuracy in large diameters*

ATMOSPHERE HARDENING • FLAME HARDENING • PRECISION HEAT TREATING  
METALLURGICAL LABORATORY • MICROSCOPY AND PHYSICAL TESTING

★ ★ ★



For excellence in production of extremely precise,  
unusually large ball and roller bearings

**THE KAYDON ENGINEERING CORP.**  
**McCRACKEN STREET • MUSKEGON, MICH.**

*Specialists in Difficult Manufacturing*

Globe, Washington Star, and the New York Times. Moreover, the Sun reported rumors of five companies interested in the ordnance plant premises.

Applicants who found that advertising jobs in Lowell were not immediately open suspected a labor-hoarding device. The Sun itself called attention to the discrepancy in the figures of needed labor in Lowell, those of the industrial postwar committee exceeding those of USES four times.

• **USES Under Fire**—The attitude of Daniel H. Quinlan, local USES manager, toward Lowell "borders on contempt," deplored a Sun editorial which recommended his removal. Another editorial cried "Nuts to McNutt," when the War Manpower Commissioner attacked Lowell for hoarding labor.

To complicate matters, U. S. Rubber didn't open within three weeks. The Sun changed its prediction to three months. Then came the news that General Electric would open a Lowell plant on Jan. 14. It counterbalanced the elimination of the late night shift in the Lowell plant of the Atlantic Parachute Corp.

G. E. in Lowell now employs about 200 workers, and "several hundred" more are to be hired by spring in a second G. E. unit.

• **Surplus, Says USES**—Actually, there is now a labor surplus of almost 5,000 women and about 2,000 men in Lowell, says USES.

**WORK NEAR HOME!**

**TAKE A JOB**   
**in a WAR PLANT**

— WITH A REAL —

**POST-WAR FUTURE**

FULL TIME — 6-DAY WEEK WITH OVERTIME

**GOOD PAY** TIME AND ONE-HALF FOR ALL OVER 8 HOURS IN ONE DAY OR 48 HOURS IN ONE WEEK

SHORT TRAINING PERIOD — UNLIMITED OPPORTUNITIES

- Good Working Conditions
- Plenty of Light
- Paid Vacation
- Steady Employment
- Modern Safety Equipment
- Clean, Sanitary Plant
- Good Wages
- Inside Work
- Life Insurance
- Health Insurance
- Pension Plan

100% ESSENTIAL INDUSTRY

We are now accepting the right type of men and women to fill the war plant positions in the new plant at the postwar period of business. These positions are available in the new plant at the postwar period of business. These positions are available in the new plant at the postwar period of business. These positions are available in the new plant at the postwar period of business.

ARRANGEMENTS FOR GROUP HIRING AVAILABLE

Within 15 minutes of Lowell, Chelmsford, Billerica Center—Wilmington—Reading—Tewksbury and Burlington.

— APPLY ANYTIME —  
NIGHT or DAY


**DO IT TODAY**

**JOHNS-MANVILLE**

High St., No. Billerica — Tel. Billerica 401

Having tasted war prosperity, Lowell, Mass., is struggling to stave off present and postwar collapse—the result of war production cutbacks. Announcement that Johns-Manville would open a new plant (above) buoyed hope that local workers might be talked out of migrating to nearby war centers.





**In twelve months  
WE BOUGHT FROM 688 SOURCES**

**Q**UITE recently a business friend asked how many insurance companies we deal with.

Our answer surprised him — a total of 688 in the United States alone in a single year!

Three important facts are to be read in this figure. First, it dramatizes the fact that we are bound to no one insurance company or group of companies. In all our buying, we are independent and unbiased.

Next, it supports our creed that we have no axes to grind, but those of our clients.

Instance by instance, the facts peculiar to the situation govern our decisions. Where

to buy is always determined by the particular requirements of the firms we serve.

Finally, it is evidence of the wide knowledge of the insurance markets of the world which we have amassed in almost a century of business.

No one man has all this information. Johnson & Higgins maintain a large staff of specially trained technicians — in order to provide for each and every client the full meaning of complete service.

*Write or phone one of our offices for further information — without obligation.*

## **JOHNSON & HIGGINS**

*Established 1845*

### **INSURANCE BROKERS**

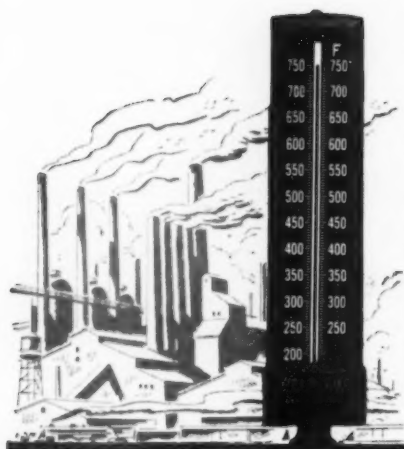
**63 WALL STREET • NEW YORK**

*Buyers of Insurance for Commerce and Industry*

CHICAGO  
DETROIT  
PHILADELPHIA  
BUFFALO  
HAVANA  
LOS ANGELES

SAN FRANCISCO  
SEATTLE  
VANCOUVER  
WINNIPEG  
TORONTO  
MONTREAL





## 750° F. is hot

**A**N American thermometer with a high reading of 750° Fahrenheit may be subjected to that temperature continuously without injury to the instrument or impairment of its accuracy.

American Thermometers regardless of scale may be used at their top ranges continuously and still retain their accuracy.

The red-reading mercury showing as a broad stripe is designed for easy reading. Wide-angled construction admits maximum light. Glareless glass, dust-excluding construction and corrosion-proof finish are other features of American thermometers.

No matter what your requirements, there is a type of American Thermometer exactly suited to your needs.

*American Glass, Dial and Recording Thermometers are stocked and sold by leading distributors everywhere. Write to them or us for information.*



**AMERICAN**  
*Industrial Instruments*

**MANNING, MAXWELL & MOORE, INC.**  
BRIDGEPORT, CONNECTICUT

Makers of 'American' Industrial Instruments, Hancock Valves, Ashcroft Gauges, Consolidated Safety and Relief Valves. Builders of 'Shaw-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties.

## More Bottles?

Outlook for glass doesn't appear too rosy, but it's better than last year's. Increased use of metal will ease situation.

Just when the bottleneck in glass containers will become something like a wide-mouthed jar is still uncertain, but the situation is easier. WPB finally got out its revised order L-103-b Jan. 4 (BW-Jan. 15 '44, p78) listing quotas for 98% of the 1944 glass production and naming 91 food products, 39 drugs, 47 chemicals, and many cosmetics that can be packaged in glass.

• **More Metal, Too**—At the same time, WPB added 22 items, making a total of 169, that can now be packaged in metal containers. They include motor oils, alcohol, roof coatings, lacquers, germicides, insecticides, sweet sirups, cranberries, etc.

The trouble in the glass situation is, of course, the quantity of products that went into glass when metals, chiefly rolled flat steel, became scarce. More metal has been made available now, chiefly to relieve the strain on paper-board, which is scarce. But the outlook for glass isn't too rosy. It's just better

than last year's. Only six weeks ago WPB's Container Division and the industry advisory committee weren't very hopeful when they foresaw no overall increase in glass production.

• **Big Gain in Output**—Production of glass containers in 1943 is estimated at 92,000,000 gross, including bottles and jars of all kinds, wide and narrow mouthed. Last year's enormous output compares with 80,000,000 gross in 1942, and 70,000,000 in 1941, and only 55,000,000 in 1940. It was achieved with practically no new facilities, by stepping up output to 100% of capacity in the face of difficulties with manpower and transportation.

Standardization of styles and sizes helped, of course, but the industry had already begun such simplification before WPB started enforcing it in 1942.

• **Figures Compared**—A breakdown of 1943 production figures compared with the number of gross produced the year before shows:

	1942 (000 omitted)	1943 (000 omitted)
Food containers .....	30,500	39,500
Prescription & drugware ..	11,000	13,000
Chemicals, household & industrial .....	5,600	7,500
Toiletries & cosmetics ....	6,700	9,200
Beverages .....	25,000	23,000

• **Not Important**—The decline shown in beverage bottle production, incident-



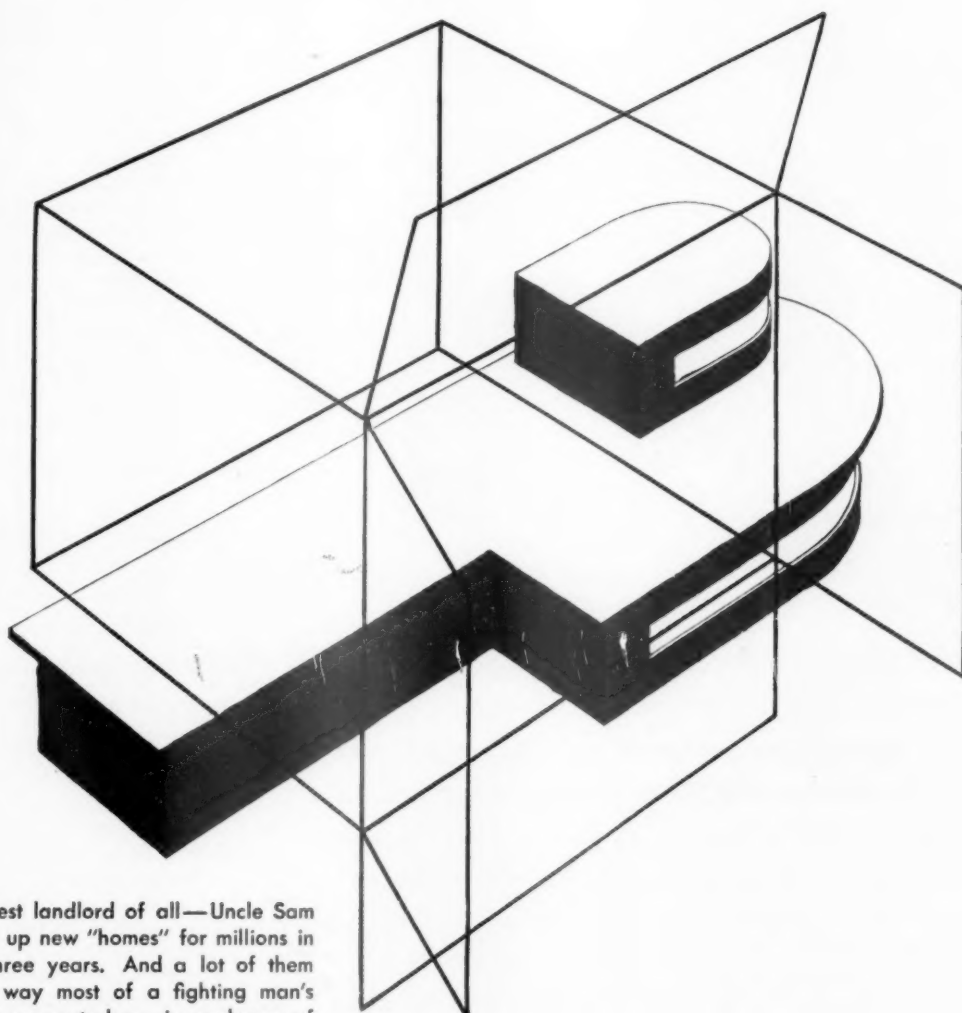
## BETTER THAN NEW

One factor permitting the sharp cutbacks in tank production is the routine good care the Army gives all of its equipment. After service in domestic training, tanks are sent to such centers

as the Detroit arsenal for overhaul before shipment overseas. The Chrysler-built General Shermans (above) will be actually better than new when mechanics are finished with them; they'll be thoroughly "broken in" and free of normal mechanical "bugs."



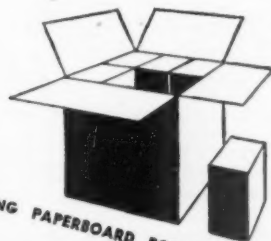
# PACKAGED HOMES!



The greatest landlord of all—Uncle Sam—has put up new “homes” for millions in the last three years. And a lot of them came the way most of a fighting man’s equipment comes today—in packages of paperboard!

Quantities of building materials, fittings and furnishings for military housing go to the job in corrugated or solid-fibre cases which save weight and bulk, simplify handling and protect against damage.

This war’s gigantic supply jobs have turned up new packaging ideas and techniques by the hundred. Some of them are “naturals” for packing peacetime products, too. Container Corporation’s staff has developed scores of them . . . perhaps you would like to talk with us about new post-war packages for your products.



EVERYTHING PAPERBOARD FOR EVERYTHING PACKED

**CONTAINER CORPORATION OF AMERICA**

General Offices: 111 W. Washington St., Chicago 2 • New York • Rochester • Natick, Mass. • Philadelphia • Cincinnati • Cleveland • Circleville  
 Detroit • Indianapolis • Wabash • Carthage • Anderson, Ind. • Peoria • Rock Island • Minneapolis • Baltimore • St. Louis • Fernandina • Dallas • Ft. Worth



# Blackhawk Helped 'em BLITZ the BLIZZARDS!



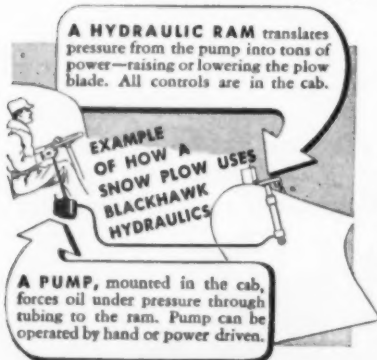
ONCE UPON A TIME, snow plow blades were operated by chain winches. Work was slow and a hardship because the men who struggled with these mechanical devices were exposed to cold and driving snow.

*Now*—About 90% of all snow plow manufacturers use Blackhawk Hydraulic Controls to operate plow blades. The operator (who also drives the truck) sits inside his warm cab, controlling a simple hydraulic pump that lifts and lowers the plow blades with ease.



**A Hydraulic System May Be the Answer for Your Product, Too!**

EVERYTHING from coal cutters to embalming tables have incorporated Blackhawk Hydraulic Systems. Scores of manufacturers depend on Blackhawk Hydraulics to give their products function, extra service, extra sales, extra speed or ease of operation. Your product, too, may have some moving part *that can be made to move more efficiently by Blackhawk Hydraulics!*



## It's Simple and Easy

to install or apply a Blackhawk Hydraulic system as part of your product. No trick valves, ballasts or other super-sensitive devices! The range of pumps and rams is wide and versatile. You are invited to write for information on Blackhawk Hydraulics — for your present or future applications. Blackhawk Mfg. Company, 5300 West Rogers St., Milwaukee 1, Wisconsin.

# BLACKHAWK

*Hydraulics*

tally, doesn't seem to be an important reason for the shortage of whisky in retail channels. WPB Container Division officials say that had the distillers desired to market more liquor there would have been bottles for it. Bottlers of soft drinks, malt drinks, wines, and distilled spirits were allowed, in the last half of 1943, 65% of the bottles used in the similar period of 1942.

Distilled spirits' share was 5,460,000 gross, but when final figures are in WPB expects they will show that liquor used only about 70% of its quota. In the free period of 1942 (the first six months) is included, the total used is expected to be only 60%.

Glass output doesn't reveal the whole picture with reference to bottle supplies because there has been a vast increase in re-use—chiefly for beer.

• **Milk Bottles**—The milk bottle situation is fairly good. Dairies take about 4% of the total glass container production every year—3,175,000 gross last year. The new quotas on glass containers do not apply to jars for home use which continue unlimited.

## War Assets Eyed

Crown company formed in Canada to dispose of surplus sinews of war tries to balance national and industrial interests.

OTTAWA—Canada already is coming to grips with the problem of disposing of surplus war assets—manufacturing plant and equipment, buildings (barracks, airdromes), furnishings, war equipment suitable for peacetime use, raw materials, and land taken over for factory sites, airfields, and other war purposes.

• **Under Light Rein**—War Assets Corp., a crown company announced late last year (BW—Nov. 20 '43, p44), is now organized and mapping its course. It will have a fairly free hand, although Ottawa holds the reins at any juncture through the Crown Assets Allocations Committee composed of ranking government officials.

Main concern of the committee is to see that government policy in such matters as allocation of surplus supplies and other assets for relief in Europe, and for postwar reconstruction in Canada, will be carried out.

Canadian business, through the Canadian Manufacturers Assn., urged as long as a year ago that some such agency be set up to prevent a "fire sale" detrimental to established business interests.

• **Centered in Montreal**—War Assets Corp. is a business man's committee;





## THROUGH HELL AND HIGH WATER

**\*IN THE "hell" of battle on world fronts—as well as in the world-wide struggle for the vital materials of peace and war—Marmon-Herrington vehicles are playing an important part.**

With our own troops and in the service of our valorous allies in Europe, Asia, Africa, Alaska, on Pacific islands and at home, these *All-Wheel-Drive* trucks, track-laying tractors and tanks are helping win battles for the United Nations.

But the services of supply and maintenance are as important as the attack. For example, oil is as important as ammunition. It must be found, wells must be drilled and pipe lines laid, no matter how rough the terrain. Logs and lumber are



needed for a thousand projects. They must be lugged through forest mud and snow. Roads must be built, widened and kept free from snow. Power, light, telephone and telegraph lines must be strung and serviced wherever they go, down highways or across hill and valley, desert and marsh.

For all of these tasks, and scores more—wherever the "going" is too tough for conventional-drive vehicles to operate successfully, Marmon-Herrington *All-Wheel-Drive* trucks are doing the "impossible" every day in the year.

All our energies and abilities, now, until Victory crowns the heroic services of our men across the seas, are devoted to strictly military production. But when Peace comes, our plant, enlarged to five times its former capacity, will be ready, with short delay, to lend effective aid to the forces of progress and reconstruction. When that glad time comes, we will have new vehicles, of still greater usefulness, to offer to the transportation industry.

☆ **Buy an Extra War Bond — Back the Attack!**

# MARMON-HERRINGTON

INDIANAPOLIS 7, INDIANA



*Liked to travel—  
...but hated to leave!*



He liked to sell . . . liked to mix with the men, keep tabs on the trade (and the competition), see for himself how the story went over. But as the business grew, he spent too much time in the office, too little on the road. And he dreaded the detail that piled up while he was away, the stacks of stale reports to be read and studied . . .

Most sales managers know how to use information; few know how to expedite it out of their own sales organizations. Getting information to flow faster, arrive earlier, and be more useful—is our business.

McBEE products, evolved from years of experience with thousands of

businesses, are basically simple tools, custom suited to your business, need no special staff, skills or machinery . . . usually cut rather than add to overhead . . . are understandable and useable by ordinary office people. Today, girls with no previous experience and little training are efficiently using McBEE techniques and products for sales analysis . . . and every other type of management report, whether in the office or factory.

Once the war is over, sales departments must be rebuilt—better and stronger than ever before. McBEE can help any sales manager find where he stands—sooner, surer. The time to find out how McBEE can help is now.



## **THE McBEE COMPANY**

295 Madison Avenue, New York City 17, New York

General Offices—Athens, Ohio . . . Offices in principal cities

headquarters are not in political Ottawa, but in the commercial center of Montreal. President is J. B. Carswell, former chief of the Washington bureau of the Munitions & Supply Dept.

Carswell sees the hope of industry—avoiding cut-rate competition of surplus supplies with postwar production—grooving with national interest at one point, clashing with it at another. The nation's main objective is maximum employment—which would be impossible if dumping of war surpluses should cut heavily into new demand. On the other hand, Canadians who have been paying one-third to one-half of their income to the government to buy these supplies will not want to see them destroyed or going to waste in storage. Carswell hopes to beat a middle path.

• **Plant Disposal Watched**—Business men are mainly concerned with the disposition of government-owned plants. They want to be heard when the question of disposal arises. British industrialists are reported to be interested in these plants, and Canada will welcome them in fields where there now is no production.

War Assets Corp. holds its charter under an order-in-council passed by Ottawa on authority of the War Measures Act. This authority will not extend beyond the war, but the job to be done certainly will. Surplus supplies from the World War still are being sold by the government.

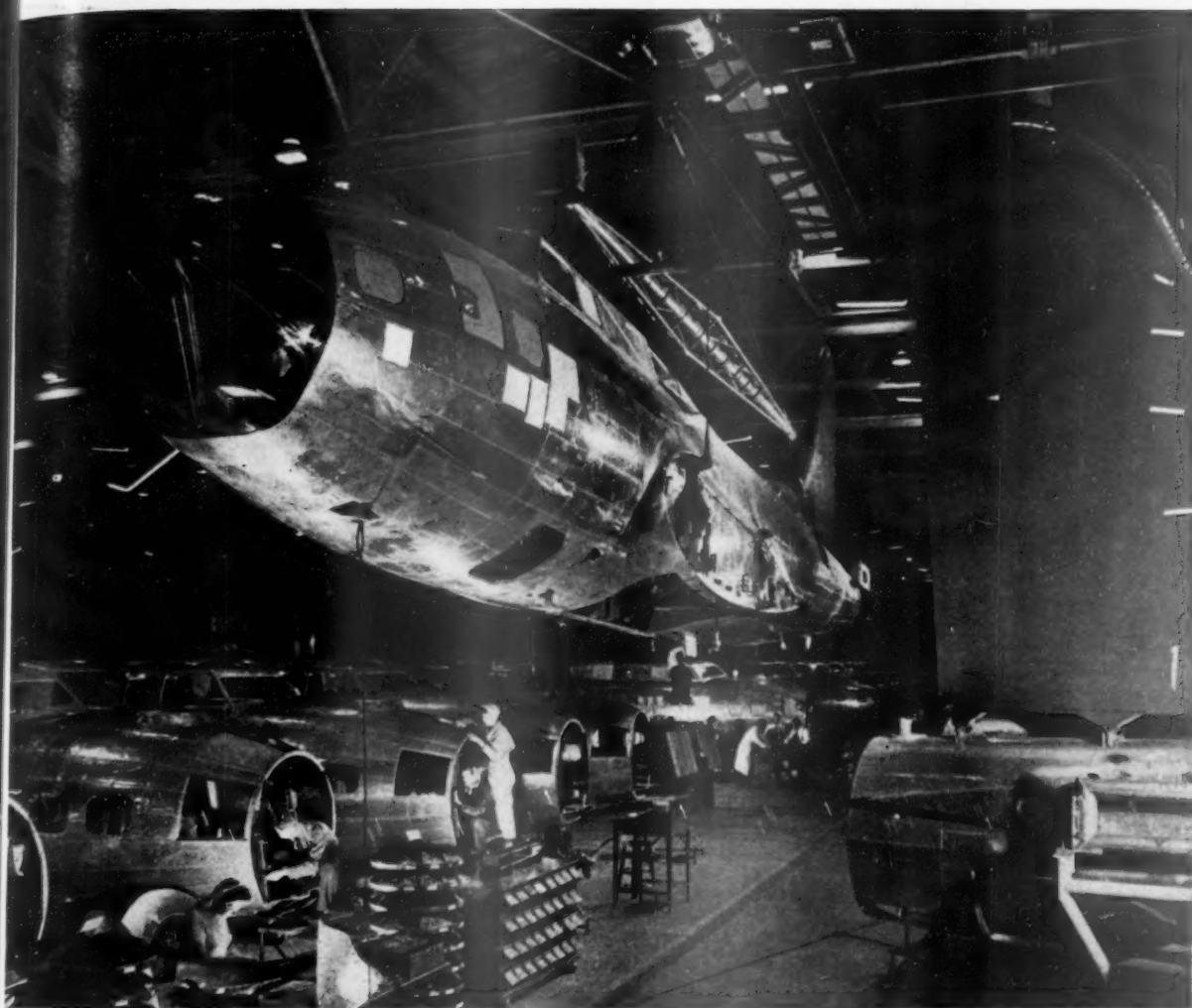
Parliament, which assembled last week, is expected to extend the life of the infant corporation to prevent too hasty disposal of excess assets.

• **Food Control**—In another line Canada has prepared for the future. Wartime Foods Corp. has been set up by the Wartime Prices & Trade Board (Canada's Office of Price Administration) to handle imports of fruits and vegetables as well as some domestic produce, and to control distribution of both types of foods.

Like War Assets Corp., the new company is in business hands—R. T. Mohan, head of General Foods, Ltd., is president; J. B. Landers of Canadian Food Distributors is general manager. It will maintain headquarters in Toronto. WPTB holds the reins through Kenneth Taylor, coordinator of its food division, who is vice-president of the new company.

• **Seeking a Balance**—Imports of fresh fruits and vegetables have been uneven and distribution somewhat chaotic. Price discrepancies have been wide, partly because some items have been ceiling-free, partly owing to markup differentials between large and small retailers. The new corporation aims at leveling off distribution, maintaining supplies, and getting prices into line.





*Finish the Fight with War Bonds*

## Flight without Wings

There is no roar of engines when the great, gleaming fuselage of a Boeing Flying Fortress makes its first flight. Smoothly and quietly it glides above the compact rows of partly completed bodies to the final assembly line. After the overhead crane has set it down in position, the wings, tail surfaces and landing gear will be joined to the fuselage and the big bomber will be ready for the air.

Thrilling even to the uninitiated, this scene holds a far deeper significance for the trained technical man. It typifies an entirely new development in production

engineering—a major Boeing contribution to wartime speed and efficiency.

The Boeing system emphasizes short-flow, multiple-line production. It provides maximum use of every foot of plant space. It allows for flexibility in design—vital to rapidly changing combat needs. *And it turns out planes faster.* Boeing's rate of production today is 10 times what it was the month before Pearl Harbor.

Boeing production engineers have proved that by completing each section of a plane separately, and bringing the sections together only in the last stages

of assembly, both space and time are saved. After a plane receives its wings it occupies several times as much room as when it is in sections. That is why even the wiring of a Fortress is fully assembled and installed before the final joining of wings and fuselage.

Without such basic innovations in design, engineering and manufacture, Boeing could never have achieved the swiftly multiplied production that now darkens enemy skies. True today, it will be true of any product tomorrow . . . if it's "Built by Boeing" it's bound to be good.



# SO MUCH FOR SO LITTLE



PAPERS made from 100% new white cotton cuttings save critical war materials. Yet the most durable L. L. Brown ledgers\*, instead of ordinary papers, add less than 1% to accounting costs, yet guarantee 100% protection—almost resistance to wear. Ask your printer for samples of the following:

## L. L. BROWN LEDGER PAPERS

\* L. L. BROWN'S LINEN LEDGER  
100% New White Linen & Cotton Fibres

\* ADVANCE LINEN LEDGER  
100% New White Cotton Fibres

FORWARD LINEN LEDGER  
100% New Cotton Fibres

L. L. BROWN'S FINE  
85% New Cotton Fibres

GREYLOCK LINEN LEDGER  
75% New Cotton Fibres

ESCORT LEDGER & MACHINE POSTING  
50% New Cotton Fibres

\* Permanent Papers

L. L. BROWN PAPER CO.  
ADAMS, MASS.



## AAF Tool Plan

Surplus "merchandise" to flow into warehouse at Chicago. Army heads off opposition, gets trade to help set up system.

Seeking disposal of sizable quantities of surplus materials, the Army Air Forces is literally going into the mill supply business by establishing a Cutting Tools Disposal Warehouse in Chicago.

• **May Set the Pattern**—Surplus "merchandise" turned up at factories where procurement district officers have canceled contracts will flow into this warehouse. For the present, only cutting and threading tools will be handled.

If the plan works, the scope of the operation may be broadened, and units may spring up in other localities. Other government agencies are eyeing the enterprise as a possible answer for their own surpluses. The plan may set a pattern to be followed generally when various branches of the government and the services seriously set out to unload.

Before opening for business, the officers organizing the warehouse headed off possible opposition from the cutting tools industry by holding a conference with distributors and salesmen of tool

manufacturers. An industry committee was formed, and members of the trade promised to contribute their know-how in putting the system into operation. • **Longer View**—Instead of regarding this development as an intrusion on their territory and a source of unfair competition, Chicago distributors are taking the longer view that the warehouse plan was essential, and that, because they have been consulted in setting it up, the bad features have been reduced to a minimum.

In effect, the AAF warehouse will function like a regular cutting tools distributing organization. Its office system will be much like those found in a well-organized mill supply house. Distributors and manufacturers will assist in making up complete sets of catalogs of cutting and threading tools of all types. They will help establish an adequate inventory record and control system.

• **Basic Restrictions**—The distribution will operate under some fundamental restrictions. First, the materials will be offered to other branches of the government and the armed forces. Then the listings will be made known to 409 prime contractors working on AAF contracts. Failing to find takers in these two groups, the tools may be sold to industrial plants, or to industrial distributors for resale to industry. The AAF has agreed to cooperate closely in establishing fair pricing schedules.



## UNINTERRUPTED FLOW

As plans for the invasion of Nazi-held Europe take definite shape, the manufacture and quick delivery of ships to make that landing rate high on the

priority list. Instead of awaiting spring thaws, landing craft—made on the Ohio River—continue their journey down the ice-filled Mississippi (above) to a Gulf delivery point behind a Coast Guard icebreaker.





## MEET YOUR NEW NEIGHBOR . . .

Hallicrafters is the world's largest exclusive manufacturer of short wave radio communications equipment. • Today, Hallicrafters is engaged in war production only . . . the 1st exclusive radio manufacturer to receive the Army-Navy Production Award for the 3rd time. • Tomorrow, Hallicrafters will build YOUR radio!



BUY MORE BONDS!

Far away places and strange customs seem that way only because of the limitations of travel and communications. Just as the rapid development of air travel made the world smaller, so is radio breaking down the traditional barriers of languages and ways of life. In the postwar world, short wave radio will be of utmost importance to everyone. Hallicrafters will *again* be the name to look to for the most advanced developments in radio.

## hallicrafters RADIO

THE HALLICTRAFTERS CO., MANUFACTURERS OF RADIO AND ELECTRONIC EQUIPMENT, CHICAGO 16, U. S. A.



## Among the missing— Unter den Linden



Unter den Linden, Berlin's most famous street, has been reduced to ruins by repeated Allied bombing.

GERMANY's power to fight is being crippled by the heaviest air bombardments in history—bringing victory nearer. When that day arrives American manufacturers can convert part of their production to urgently needed household, farm and industrial products. Many of these will be made of sheet steel—the material so economical, adaptable and easy to fabricate.

Sheet steel is not one but a large family of steels—each with distinct characteristics and advantages. For more than forty years ARMCO has been developing and improving *special purpose sheet metals*. One of these is ARMCO Stainless Steel. Now serving in vital parts of planes and other war equipment, this strong,

bright, rustless metal will have thousands of interesting peacetime uses.

ARMCO will be glad to consult with your company on the selection and fabrication of special steels for your products—war or post-war. Over the years ARMCO also has acquired a wide knowledge of the marketing and merchandising of sheet metal products.

Possibly we can offer your product engineers and sales executives some valuable suggestions that will give your company desirable advantages in design, production and marketing. Write to The American Rolling Mill

Company, 851 Curtis St., Middletown, Ohio.

★ ★ ★

HELP FINISH THE FIGHT—  
WITH WAR BONDS



**Special Purpose Steels FOR TOMORROW'S PRODUCTS**

## Bootleggers Stick

They're still digging coal on company property despite years of effort to oust them. Now they have a trade association.

Since the start of the depression Pennsylvania's anthracite bootlegger has been the curse of the collieries. State authorities and mining officials took turns formulating plans to stamp out the evil, but all corrective measures produced the same result: the outlaw miners continued to work their illegal "claims," digging coal on property which wasn't theirs.

• **Governor Got Tough**—Last year, Gov. Edward Martin got his back up and ordered the bootleggers to scram—then granted one reprieve after another to allow the miners time to find legitimate jobs.

In the fall, the governor took a last-ditch stand. He decreed that anybody caught illegally mining anthracite after Nov. 30 would be prosecuted as a thief (BW—Oct. 30 '43, p. 34).

• **Still in Business**—If this frightened the bootleggers, the results don't show it. They're still doing a thriving business, and, because of the fuel shortage, they're enjoying new-found respect in households that would snub black-market butter.

The bootleggers, in fact, now have achieved a modicum of solidarity by organizing what they call the Independent Miners, Truckers & Breakermen's Assn. of Schuylkill, Northumberland & Columbia Counties.

• **War Effort Cited**—So far, the association's boldest venture has been to appeal to Washington from the governor's death sentence—with the argument that to halt bootlegging now would obstruct the war effort. The association claims that 5,400 "independent" miners are digging anthracite at the rate of 6,000,000 tons a year, but the figures are disputed vigorously by both the state and the industry. State estimates put the depredations nearer 2,000,000 tons a year.

The Philadelphia & Reading Coal & Iron Co. has obtained a temporary injunction restraining eleven of the bootleggers from pursuing their activities on company property, and other collieries are expected to follow that example.

• **Cities Go to Bat**—But in the meantime, Mayor Bernard Samuel of Philadelphia has asked the Solid Fuels Administration to determine whether bootleggers could help relieve the city's fuel crisis, and the city of Easton, Pa., practically clasped the bootlegger to its

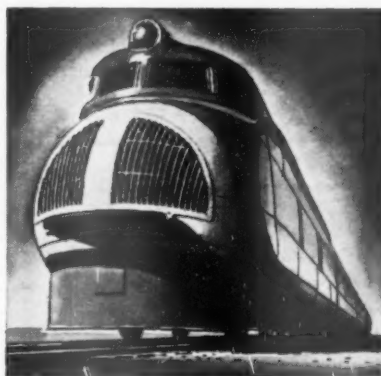


# 1944

## 10<sup>th</sup> Birthday of the Streamliner

★

**On February 12, 1934, the M-10,000, first modern American streamliner, was delivered by its builder, Pullman-Standard, to the Union Pacific Railroad**



*The M-10,000*

LEHIGH VALLEY RAILROAD COMPANY  
THE NEW YORK CENTRAL RAILROAD COMPANY  
THE NEW YORK, NEW HAVEN & HARTFORD  
RAILROAD COMPANY  
NORFOLK & WESTERN RAILWAY COMPANY  
THE PENNSYLVANIA RAILROAD COMPANY  
THE PULLMAN COMPANY  
ST. LOUIS SOUTHWESTERN RAILWAY COMPANY  
SEABOARD RAILWAY  
SOUTHERN PACIFIC RAILROAD COMPANY  
SOUTHERN RAILWAY SYSTEM  
UNION PACIFIC RAILROAD COMPANY

There, truly, is stirring proof of confidence in products built by Pullman-Standard—a confidence rooted in its sound engineering practices, in unequalled organization and manufacturing facilities—in the experienced judgment born of 85 years in the building of railroad equipment.

Of those 1505 lightweight cars—with their low maintenance costs—not one has failed. And every type of Pullman-Standard-built car has met and withstood the severe safety test conducted by the Association of American Railroads since that test was instituted.

And how do "people" feel?—the vast army of men and women who ride on trains? They have expressed their preference by paying fares; have made Pullman-Standard streamliners the top revenue producers of all.

Why this enthusiastic public acceptance? Not only because of the comfort and convenience offered by this modern lightweight transportation, but in addition because of its *safety*—of that instinctive reliance that men everywhere place in products they know to be trustworthy.

These brilliant advances of the last ten years promise well for future performance. Expect comforts, and conveniences, beyond any you have known. Expect improvements born of new knowledge gained in the vast laboratory of war production. To the achievement of those goals we bring many new assets of heightened ingenuity and new skills; and also an old one which will never change—the fundamental belief in quality, the traditional purpose that every product of Pullman-Standard shall first and of all things be *safe* and dependable. For this company, while ever alert for what is new and worthy to be used, has never compromised with safety—knowing that progress and safety can go hand-in-hand—has never, for the sake of novelty, experimented at the public risk. And never will!

### *All Out for Victory in 1944*

*We have been asked by the railroads, in cooperation with the Government, to build passenger coaches in 1944 to support wartime transportation. To hasten victory, we shall continue at top speed to produce weapons of war. We have built or are building escort, rescue and landing ships, freight cars, troop sleepers and hospital cars as essential vehicles of war, and vast quantities of tanks, gun carriages, plane assemblies, shells and bombs, trench mortars and parts for anti-aircraft gun mounts.*

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★  
★ *Let's buy Bonds* ★  
★ Then one bond more for "Victory" ★  
★ in '44." Let's all back the attack. ★  
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

IN 1933, after painstaking investigation of all car manufacturers' designs, the Union Pacific Railroad commissioned Pullman-Standard to build America's first modern streamlined train. It is significant that, in the following ten years, Pullman-Standard—creator of that extraordinary innovation—built more than 71% of all lightweight streamlined cars purchased.

By December 1941, after seven years of service and 899,113 miles of fast, comfortable operation during which it had earned over three times its original cost, the *City of Salina* (formerly the M-10,000) was no longer able to handle the heavy traffic demands without adding cars which was impracticable with this type of articulated train. However, it had pioneered lightweight equipment—proved its practicability and economy. With the shortage of aluminum the Union Pacific, nine days after Pearl Harbor, offered the train on the altar of freedom to be transmuted into swift fighting planes—fitting reincarnation for a grand and honored pioneer.

On February 12, 1934, modern rail transportation was born. Pullman-Standard made railroad history in the ten years that followed, up to the stoppage enforced by the War Production Board, 2116 lightweight passenger cars were built by the car building industry of which 1505 or almost three-fourths of the total were built by Pullman-Standard for the following 18 railroads and The Pullman Company:

THE ATCHISON, TOPEKA & SANTA FE  
RAILWAY COMPANY  
BANGOR & AROOSTOOK RAILROAD COMPANY  
BOSTON & MAINE RAILROAD  
CHICAGO & NORTH WESTERN  
RAILWAY COMPANY  
THE CHICAGO, ROCK ISLAND & PACIFIC  
RAILWAY COMPANY  
GREAT NORTHERN RAILWAY COMPANY  
ILLINOIS CENTRAL RAILROAD COMPANY  
THE KANSAS CITY SOUTHERN  
RAILWAY COMPANY

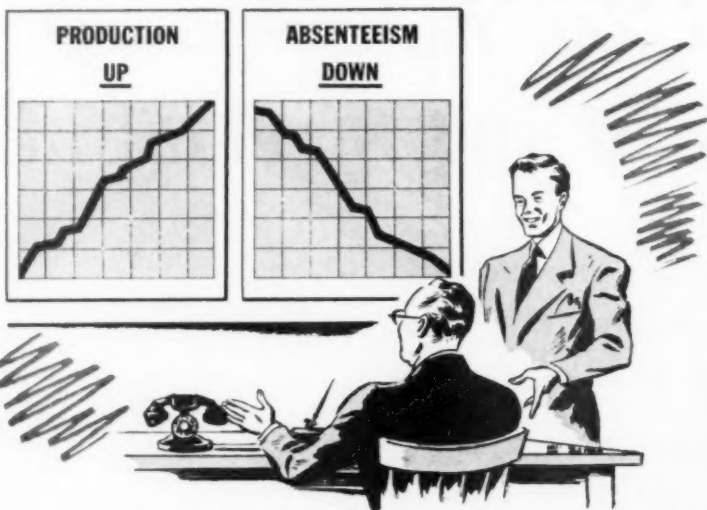
## PULLMAN-STANDARD CAR MANUFACTURING COMPANY

Chicago, Illinois . . . Offices in seven cities . . . Manufacturing plants in six cities

© 1944, P. S. C. M. CO.



Far sighted manufacturers are selecting their  
post war Pacific Coast Factory Sites NOW!



## SANTA CLARA COUNTY CLIMATE Increases Production as much as 15%\*

Engineers state 59 deg. F. is the ideal working temperature. That's a theoretical, average figure, of course. But in Santa Clara County the actual approaches the ideal. Year round temperature averages 57.9 deg. F. with a low of 47.7 deg. F. in January to a high of 67 deg. in July. There is no snow—moderate rains that occur largely in 3 to 4 months—and a low average wind velocity.

### CLIMATE MEANS ECONOMIES

\*Manufacturers who operate plants throughout the United States estimate the climate of Santa Clara County results in production increases as high as 15%. Practically no plant heating problems in winter, nor air conditioning worries in summer.



WRITE TODAY for Post War Pacific Coast, a factual book about Santa Clara County. No cost or obligation.

DEPT. W SAN JOSE CHAMBER OF COMMERCE, SAN JOSE, 23, CALIFORNIA

### THE SPOT FOR YOUR PLANT

Besides climate, your Santa Clara County plant will enjoy central location, at the population center of the Pacific Coast...a preferred plant location on main highway and rail lines...exceptionally low taxes...an abundant supply of co-operative labor...the greatest power pool in the world...unlimited natural gas and water...and a host of other advantages.



# SANTA CLARA COUNTY *California*

The population center of the Pacific Coast

municipal bosom by dropping, temporarily, the city tax on out-of-town haulers.

Whatever may be the view of the bootleggers on the ethics of the production phase of their operations, they are unswervingly righteous in the merchandising phase. They refuse to violate OPA price ceilings on anthracite, fearing OPA would drive them out of business. Even so, their prices have risen \$1 to \$2 a ton since the war started.

## Services Relent

Army Air Forces and Navy yield to pressure and provide hotels for wives with husbands returned from battle.

The regiments of service wives who have followed their husbands to Florida over the frenzied protests of Army and Navy officials have won a partial victory. • **For Officers and Wives**—The Army Air Forces has reserved the swank, 132-room Lord Tarleton Hotel at Miami Beach for the exclusive occupancy of officers returned from overseas, and their wives.

And the Navy has taken over from the Army the Flamingo Hotel at Miami Beach to house the families of 225 officers staying in the area between tours of active duty.

It is only the barest kind of relief for the service wives from the housing congestion which grips the areas around all the sun-bathed training posts (BW—Jan. 15'44, p20), and with the AAF it is still an experiment. Similar accommodations may be provided later for noncommissioned officers.

• **Plenty of Leisure**—Children are taboo at the Tarleton. Husbands and wives pay \$2 a day. AAF officers are given 20-day furloughs immediately upon their return from overseas. But they have much leisure during the 15-day processing period at the Miami Beach redistribution station which precedes their reassignment and are anxious to have their wives with them.

With rare exceptions, wives of students in the AAF's Officer Candidate School are lucky to find dormitory space. During the first month of a student's four-month course, his wife doesn't get a glimpse of him. Later they may hope for a ten-minute rendezvous now and then, and perhaps a few evenings off post, but that's the extent of it. Service men permanently stationed at the post usually keep their wives in rooming houses and inexpensive apartments in Miami.

There are exceptions. Constance Ben-



ing, tempo  
of town co  
view of the  
the produ  
as, they a  
e mercha  
to violen  
acate, fea  
out of bu  
have me  
started.

ett, the film actress, rented a lavish establishment at Miami Beach while her husband, Gilbert Roland, was winning the bar.

**Other Navy Hotels—Occupancy of the Flamingo marks the Navy's first incursion into Miami Beach. It operates similar between-tours establishments in Key West, Fla., and Norfolk, Va. Rentals are based on the size of families and class of accommodations.**

## nt Bins for Housing

and Navy  
provide  
usbands

Wheat storage units may be converted to house migratory farm workers. Houston firm is interested in unique idea.

ives who  
o Florida  
rmy and  
victory.  
e Arm  
nk, 132  
Miami  
y of de  
id them

er from  
Miami  
25 offi  
ours of

lief for  
g con-  
and all  
7-Jan.  
is still  
ations  
mmis-

taboo  
wives  
n 20-  
their  
have  
neces-  
istri-  
r re-  
their

stu-  
date  
ace.  
nt's  
get  
pe and  
off  
ice  
ost  
ng in  
m-

4

Wooden grain bins will provide something novel in the way of housing if plans of the War Food Administration's Office of Labor carry through.

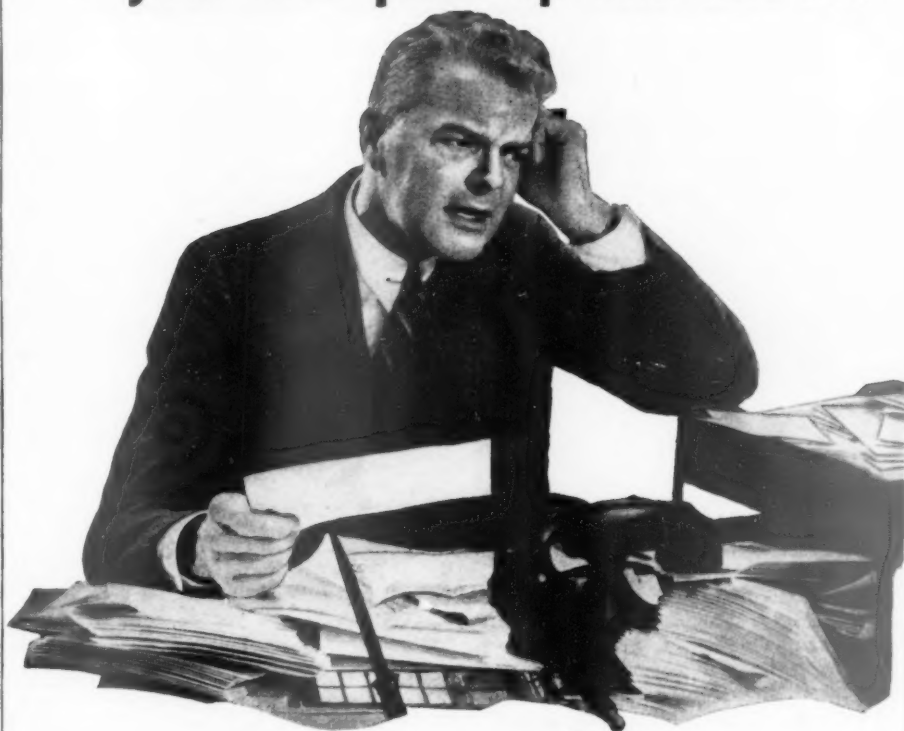
• **Farmers Buy Some**—In 1942, the Commodity Credit Corp. bought 73,000 bins at a cost of \$20,000,000 for storing loan wheat on which farmers defaulted (BW—Jul.25'42,p22). Since then, one-third of them have been sold to farmers, and the CCC would like to get rid of the rest. There are 25 different sizes, the largest having a floor space of 14 by 24.

The Houston Ready Cut House Co. of Texas recently became interested in the large size for conversion into homes for war plant workers. There are 6,500 of these bins, 2,500 in storage at manufacturing plants, the remainder scattered all over the Great Plains. The company estimated cost of conversion at \$1,250, plus the price of the bin—about \$350.

• **Variance in Ideas**—The bins will go, however, to WFA's Office of Labor if Congress will put up the money. WFA plans to convert them into living quarters for migratory farm workers at a cost of \$65, plus the cost of the bin. While the Houston company planned to convert the bins into neat white clapboard, green trim cottages, WFA expects merely to convert the grain doors into louvres, cut a few windows, hang a screen door, and let the inside go unfinished.

• **To Keep Steel Bins**—CCC still is trying to sell the remaining 41,500 bins of assorted sizes to farmers. CCC also owns thousands of steel bins, but they are not for sale. It built 63,000 of these "corn poppers" for \$10,000,000 during Henry Wallace's ever-normal-granary heyday in the 30's. Some were later sold to farmers, but the rest are being held for postwar restoration of the ever normal granary.

# If your mail piles up like this ...



## Send for this ...

**THIS MORNING** did you find your desk swamped with letters, inquiries, orders, memos? Yesterday's mail buried under today's?

Then Hammermill's pocket-size book, "Very Promptly Yours," will be useful to you.

It is filled with simple, usable ideas to help you speed up your correspondence, organize your files to get information promptly, route important letters through your office, save hours of unnecessary delay ... and answer today's mail **TODAY**.

**Back the attack—BUY BONDS**



It shows office-tested methods which your printer can easily adapt to your particular needs.

Mail coupon now for your free copy of "Very Promptly Yours."

**HAMMERMILL**  
Papers

HAMMERMILL Paper Co., Erie, Pa.  
Dept. BW 2-5

Please mail me a free copy of "Very Promptly Yours."

Name .....

Position .....  
(Please attach to your company letterhead)



# COMMODITIES

## More for Farmers

WFA would double cost of price support program in 1944. Dairy fee payment is expected to cause biggest argument.

Increases in government support prices for soybeans, flaxseed, peanuts, and sugar beets, and a continuation of dairy feed payments to farmers throughout the year are the principal features of a proposed schedule of 1944 agricultural supports submitted to Congress last week by War Food Administrator Marvin Jones (BW-Jan.29'44,p5).

• **Loans and Purchases**—Prices of basic crops—corn, cotton, peanuts, rice, tobacco, and wheat—would be supported by loans (and in the case of peanuts and tobacco by purchases) at 85% to 90% of parity at the beginning of the marketing season for the respective commodities; prices of nonbasic, war proclamation commodities—such as soybeans, potatoes, dry beans, and wool—would be supported by loans or purchases, or both, at prices up to 133% of parity.

**Dairy feed payments.** Most debated in Congress will be the proposed continuance of dairy feed payments instituted last October to induce farmers to maintain milk production in the face of rising feed costs. Payments through December were 30¢ to 50¢ per cwt. of milk delivered, or 4¢ to 6¢ per lb. of butterfat. In January, 1944,

the payments were upped to 35¢ to 50¢ on milk, or 5¢ to 6¢ on butterfat.

WFA now proposes to pay farmers through Dec. 31, 1944, not less than 30¢ per cwt. for whole milk or 4¢ per lb. for butterfat above the returns reflected in supports at 46¢ a lb. for U. S. Grade A or 92 score butter, Chicago basis; 27¢ a lb. for U. S. Grade A or No. 1 American cheddar cheese, Plymouth (Wis.) basis; and 14¢ for U. S. extra grade spray process skim milk powder, and 12¢ for U. S. extra grade roller process skim milk powder, f.o.b. mid-western plants.

Prices of the dairy products would be supported by purchases at the designated levels. The whole operation—dairy feed payments plus price supports—is calculated to yield farmers 120% to 125% of parity for milk and butterfat.

**Vegetable oil crops.** Soybeans would be supported at \$1.94 a bu. for green and yellow soybeans grading No. 2 or better with 14% moisture content, as compared with \$1.80 per bu. in 1943. Loans would be offered farmers at the support level, or the beans would be bought from processors under contract to pay farmers not less than the support price. The soybeans would be resold to processors at lower or higher prices depending upon oil content of the beans and location and efficiency of processing plants.

Spanish and Virginia type peanuts would be supported at \$150 a ton as compared with \$140 a ton in 1943; and runner types at \$140 a ton as compared with \$130 a ton in 1943. Loans would be offered farmers at the support levels, or the peanuts would be bought by grower associations as agents for WFA. Peanuts would be resold to processors (\$90 a ton in 1943) at a loss, and to shellers (\$175 a ton in 1943) at a profit.

Flaxseed would be supported at \$2.85 a bu. for U. S. Grade No. 1, Minneapolis basis, as compared with \$2.85 a bu. in 1943. Loans would be offered to farmers at the support level. WFA would also offer to purchase linseed oil and meal from processors agreeing to pay not less than the support prices for all flaxseed they purchase.

**Sugar crops.** WFA would make price supporting agreements with sugar beet processors to assure farmers an average of \$12.50 a ton for sugar beets of average quality, as compared with \$11 a ton in 1943. To effect this result, WFA would pay processors \$2 a ton above 1942 prices as compared with 1943 payments of \$1.50 a ton above 1942 prices.

Producers of Louisiana sugar cane would be assured \$6.25 a ton for cane (as compared with \$5.73 a ton in 1943) through contracts with processors to pay producers 85¢ a ton above 1942 prices, as compared with 1943 payments of 33¢ a ton above 1942 prices.

**Wool and other commodities.** WFA would buy the 1944 domestic production of wool at ceiling prices (recently 133% of parity) less handling costs, and offer to sell the wool at ceiling prices. Eggs would be supported by purchase at 90% of parity, but in no event less than specified prices to be announced from time to time, to reflect not less than a U. S. average farm price of 30¢ a doz. in spring and early summer, and an annual average of 34¢ a doz.

Potatoes would be supported by loans or purchases to reflect not less than 90% of the parity price calculated as of Jan. 1, 1944, for early and intermediate potatoes, and July 1, 1944, for the remainder of the crop.

No changes are proposed for 1944 in the 1943 support prices for most other commodities—dry beans, smooth dry peas, potatoes, poultry, rye, hemp.

• **Double the Cost**—The 1944 price support program would cost approximately \$700,000,000 (compared with \$350,000,000 in 1943) of which an es-



## FLOATING FREEZERS

Fresh water fish—still wiggling—and vegetables picked at their prime can now be processed, frozen, and packed right at scenes of their origin, then transported to distribution points by

Tennessee Valley's experimental floating food plants. Designed to take advantage of local fish hauls and crops along the route of TVA's vast chain of lakes, the plants—built on barges (above)—are now anchored on Watts Bar Dam Lake at Spring City, Tenn.



The plant, to which a third barge is to be added, has processed many of the region's products—including carp and catfish—the bulk of its 1943 output being shipped to the cafeteria at Fontana Dam in North Carolina where thousands are employed.



ed at \$2.50  
Minneapolis  
but in 1943  
higher supports for soybeans and pea-  
mers at the  
also offer  
from post-  
the sup-  
purchase.  
e price sup-  
bet pro-  
e of \$12.50  
quality, a  
To effect  
cessors \$5  
pared with  
here 1942

ated \$300,000,000 would be on ac-  
count of dairy feed payments. The  
higher supports for soybeans and pea-  
mers would cost an estimated \$100,000,-  
000 as compared with \$50,000,000 in  
1943.

The proposed increase of \$1.50 a ton  
in payments to producers of sugar beets  
would cost about \$35,000,000 as com-  
pared with less than \$10,000,000 in  
1943. The increase of 52¢ a ton to  
Louisiana cane sugar growers would cost  
\$5,000,000 compared with less than  
\$2,000,000 in 1943.

• **To Push Production**—Increased prices  
for vegetable oil crops and sugar beets  
are designed to push production up to  
the 1944 goals (BW—Oct. 16 '43, p19).

**Wool Piles Up**  
Growers, worried over big  
surplus, seek assurances gov-  
ernment won't disrupt market  
by underselling stockpiles.

American wool growers, like pro-  
ducers of many another commodity, are  
worried about the huge stockpile the  
government piled up for war—a stock-  
pile that's now a surplus. One grower  
attending the 79th annual convention  
of the American Woolgrowers' Assn. in  
Denver last week proposed a "Boston  
tea party" to wipe out the surplus.

• **They Aren't Consoled**—Even the fact  
that the enormous consumption of '42  
and '43—more than a billion pounds  
each year—promises to continue through  
this year to supply wool-hungry civil-  
ians doesn't console growers or the other  
elements of the industry in the Ameri-  
can Wool Council, which met jointly  
with the growers.

Normal U. S. peacetime consumption  
is about 600,000,000 lb. yearly, and the  
carryover on Jan. 1 was about 1,200,-  
000,000 lb. or two years' normal supply.  
This doesn't include some 470,000,000  
lb. held here by England under bond;  
of course, this is not to be sold here.  
But the growers ask: What if the State  
Dept., which bought some 80,000,000  
lb. of apparently unneeded wool from  
Uruguay pursuant to the good neighbor  
policy, should decide to be a good  
neighbor to Britain?

• **The Background**—Here's what has hap-  
pened to wool: Defense Supplies Corp.  
originally bought all-out (mostly from  
Australia) because the U. S. produces  
only about 500,000,000 lb. yearly, or  
half this nation's average yearly '41-'42  
needs. Then the services slackened in  
buying late last summer, pushing off  
the last half of their purchase program  
until early '44, and serving notice they'd



... and let us help you!

**R**EGARDLESS of what  
you will manufacture  
POST-PEACE—the chances are  
99 to 1 that dust control  
will present a problem you'll  
be faced with solving. That  
is why we are suggesting  
NOW that you let us plan  
with you on your future  
needs for either atmospheric  
or process dust control.

No obligation on your part  
is involved in discussing  
your possible needs. Our  
engineering department is  
ready to help you now and

can blueprint your dust con-  
trol system for order when  
it is needed.

This offer to study your  
problem and make recom-  
mendations, without cost to  
you, is a service which will  
facilitate *your* and *our* post-  
peace operations, and obtain  
the quickest possible de-  
livery of equipment when  
priorities are lifted. AAF  
is accepting orders for post-  
war delivery NOW — and  
these orders will be filled  
in the order of their placing.

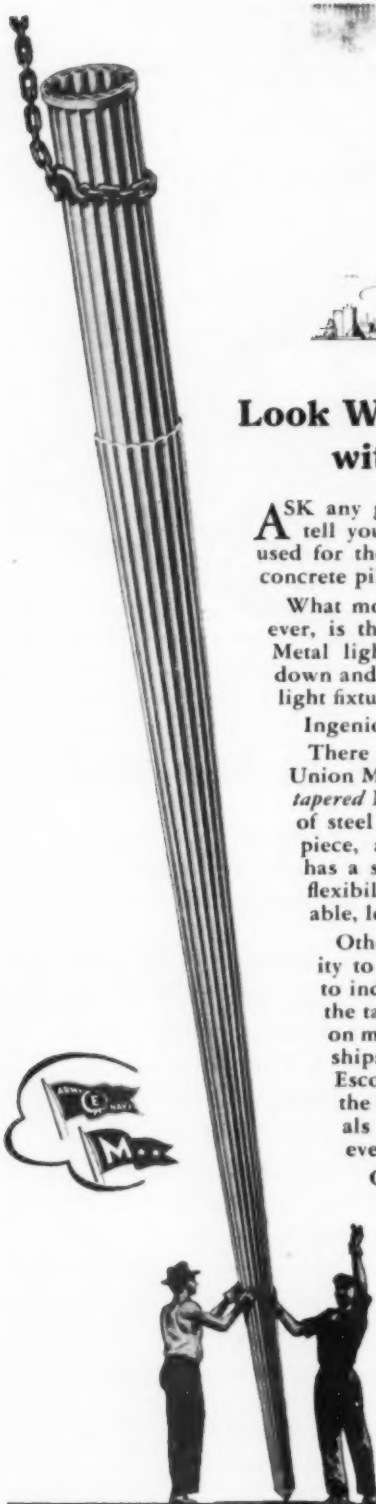
**AMERICAN AIR FILTER CO., INC., 387 Central Ave., LOUISVILLE, KY.**

In Canada: Darling Bros., Ltd., Montreal, P. Q.



SUPPLYING CLEAN AIR FOR ALL TYPES OF INDUSTRY





## Look What We Did with a Lamp Post!

**A**SK any general contractor, and he'll tell you this is a fluted steel casing used for the installation of cast-in-place concrete piling.

What most of them don't know, however, is that basically it's also a Union Metal lighting standard—turned upside down and given a steel nose in place of a light fixture.

Ingenious?

There are many ingenious features in Union Metal products. The design of that tapered Monotube, for instance, is a work of steel fabricating art in itself. Of one-piece, all-steel, tubular construction, it has a surprising degree of strength and flexibility for its weight—gives dependable, low-cost service wherever it is used.

Other examples of Union Metal's capacity to produce metal products profitable to industry and the nation can be seen in the tapered, tubular steel booms installed on many of America's Liberty and Victory ships, in masts for LST and Destroyer Escorts, in the practice bombs used by the Navy, and in the broad line of materials handling equipment being employed every day by war plants.

Of course right now all of our efforts are being devoted to Uncle Sam. But tomorrow, when peace comes, our manufacturing facilities, as well as the skills of our craftsmen and the pent-up plans of our designers again will be made available to *you*.

**THE UNION METAL  
MANUFACTURING CO.**  
Canton, Ohio

**UNION METAL**  
*Craftsmen in Steel Fabrication*

## MILLS ARE RUSHED

Here's the story of wool on the consumption side: A year ago domestic woolen mills were making 70% of their output for military use, 30% for civilians. But they were running at such a whopping rate—a billion pounds of wool compared with 600,000,000 lb. normally—that the 30% represented a normal 50% or more.

Then service buying slackened, and mills are now working 70% for civilians and 30% for military. But they're still going full speed, or as near as they can in the face of a labor shortage; so present production of woollens for civilians is away over 100% of normal in some categories.

This should continue, barring an unexpected increase in military needs, because there are high demands, low garment inventories, and restrictions to a few simple weaves. The machines are putting out faster.

Mills are within a few months of the retail market. They're now working on 1944 summer stuff—while before the war it took six to nine months for the weaves to reach the consumer.

be interested only in replacement thereafter.

DSC is left with 320,000,000 lb. of foreign wool. Meanwhile, rumors of the services' intention had weakened the domestic market; at the growers' frantic pleas, Commodity Credit Corp. stepped in last spring and now owns 220,000,000 lb. of domestic wool, bought to hold the price up. Incidentally, CCC can't continue this without subsidy funds. Thus, the congressional subsidy row provides another headache for growers.

But the biggest headache is that 320,000,000 lb. of foreign wool held by DSC, since all government agencies concerned now seem agreed to feed it into the domestic market at once. This is contrary to the original understanding of growers—that it would be dumped abroad—and at the Denver meeting they freely charged lack of faith.

● **No Promises**—Nor would government officials—such as Kenneth W. Marriner, assistant textile chief of WPB, and Lawrence Myers, wool chief of CCC—promise that imports will be cut off while the foreign wool is being sold. On the contrary, Marriner told the convention that imports must continue. Also, there's no present device by which the U. S. could embargo foreign wools. There is a tempting market for wools





# Advance Against Depression

**B**ANKERS wired caution. Friends of the company advised against it. But a farsighted management stood firm. Their idea of defense against depression was attack.

So started another phase of major expansion for The Youngstown Sheet and Tube Company - in 1933, proposed for construction 79-inch continuous hot and cold strip mills, most advanced type to date, -- in 1934, a great seamless tube mill, first of its kind built in America in over 7 years.

In 1935, the new hot strip mill began to roll the steel that helped speed recovery--steel for millions of automobiles and trucks, refrigerators, ranges, washing machines, furniture, roofing, tin plate. Other continuous mills followed. Plant additions and improvements kept coming through all those lean years - to make better steel.

Thus Youngstown advanced, grew stronger, contributed to the nation's recovery from depression--an opportunity better to serve America created by free enterprise. Only in a free economy could any company retain good profits made in good times to invest in jobs and improved equipment in bad times. Only under this system would a manager be permitted to decide on a \$25,000,000 expansion in a depression. And only with full restoration of free enterprise can American industry hope successfully to do its share of the colossal task of rebuilding world peace and prosperity after the war is won.

*Historical Series - - - No. 11*

## YOUNGSTOWN

THE YOUNGSTOWN SHEET AND TUBE COMPANY

YOUNGSTOWN, OHIO

Manufacturers of

CARBON - ALLOY AND YOLOY STEELS

Pipe and Tubular Products - Sheets - Plates - Conduit - Bars - Tin Plate  
Rods - Wire - Nails - Tie Plates and Spikes - Alloy and YOLO Steels

CHARGING COLD SCRAP INTO ELECTRIC FURNACE



# SLY DUST FILTER Collects Dust in Grinding Operations



Dust created in manufacturing special grinding wheels is pulled into intake hoods, thence through flexible exhaust pipes into the Sly Dust Filter shown above.

The Sly Dust Filter with fan house, where the dust is filtered from the air by means of a unique cloth bag system, offers many exclusive advantages. This is but one of over 5000 installations in operation today. Sly Dust Filters are suppressing and collecting 111 kinds of dust in 57 industries. What is *your* dust problem? Ask for Bulletin 98.

**THE W. W. SLY MFG. CO.**

Since 1874

4749 Train Avenue • Cleveland 2, Ohio



that can be brought here in ships that go out carrying war supplies.

As to price: Australian wools sell for an average of 66¢ there (scoured basis) and the tariff is 34¢, so they're coming in at about \$1.

American wools have been stabilized at an average of \$1.18 since Pearl Harbor. Growers say costs have gone up so much that they need at least \$1.30.

• **Could Undersell**—There would seem to be no way for DSC to get rid of its foreign stockpile save by slightly underselling the import price to keep out all except specialty wools. Government officials won't say at what price the stockpile probably will be sold.

Underselling would weaken the domestic market and throw a heavier burden on CCC's shoulders. A partial solution proposed by F. E. Ackerman, director of the American Wool Council, is to buy hugely for the United Nations Relief & Rehabilitation Administration.

• **Goat Wool Scarce**—The market for lamb and sheep for slaughter is weak too, because growers are throwing their "woolies" on it to cut down unwanted wool production. And here's an odd one—merino or goat wool is scarce because unrated goat meat, or chevon, is for the first time in steady demand as a staple food (BW—Dec. 4'43, p40).

## Mine Fears Aired

Nonferrous group worried about postwar outlook as huge stockpiles loom. Industry isn't happy over U. S. policies.

There will be a lot of swords to beat back into plowshares after the war. This prospect worried members of the nonferrous mining industry, meeting last week in Denver at the western division convention of the American Mining Congress (the eastern division is largely concerned with coal).

• **Postwar Fears**—The industry fears that peacetime ore requirements will be so much less than those for war that many U. S. mines may have to close (as happened after the World War), particularly in view of the stockpile already produced and the vast impending reergitation of metals in all forms—processed or semiprocessed, battlefield scrap, obsolete and superfluous weapons.

The nonferrous industry is comparatively small and produces copper, zinc, lead, molybdenum, mercury, vanadium, tungsten, and other alloying and specialty metals.

• **Needs Are Met**—Convention delegates took due pride in reports that this

industry, employing less than 100,000 persons, had more than met the mighty needs of this war—a need for five times as much copper, for instance, as in the World War—to such an extent that WPB is now discouraging the opening of new mines. This achievement means that the industry mined and treated more than 300,000,000 tons of ore in 1943.

But the achievement was the text of a warning by A. H. Bunker, WPB vice chairman for metals, that the war drain on U. S. resources, together with expanding peace needs of the next generation, might leave this a "have-not" nation in indispensable metals.

• **Immediate Worries**—It may seem that this view contradicts those of the industry, but it doesn't. Operative worries are immediate, among them the fear that a U. S. postwar policy of internationalism might force many companies into idleness while the U. S. buys metals abroad.

One operator gloomily said he sometimes wished he were a good neighbor rather than a U. S. citizen. Such a feeling is said to be virtually unanimous among U. S. producer groups. There were forecasts of formation of a producers' bloc for mutual protection.

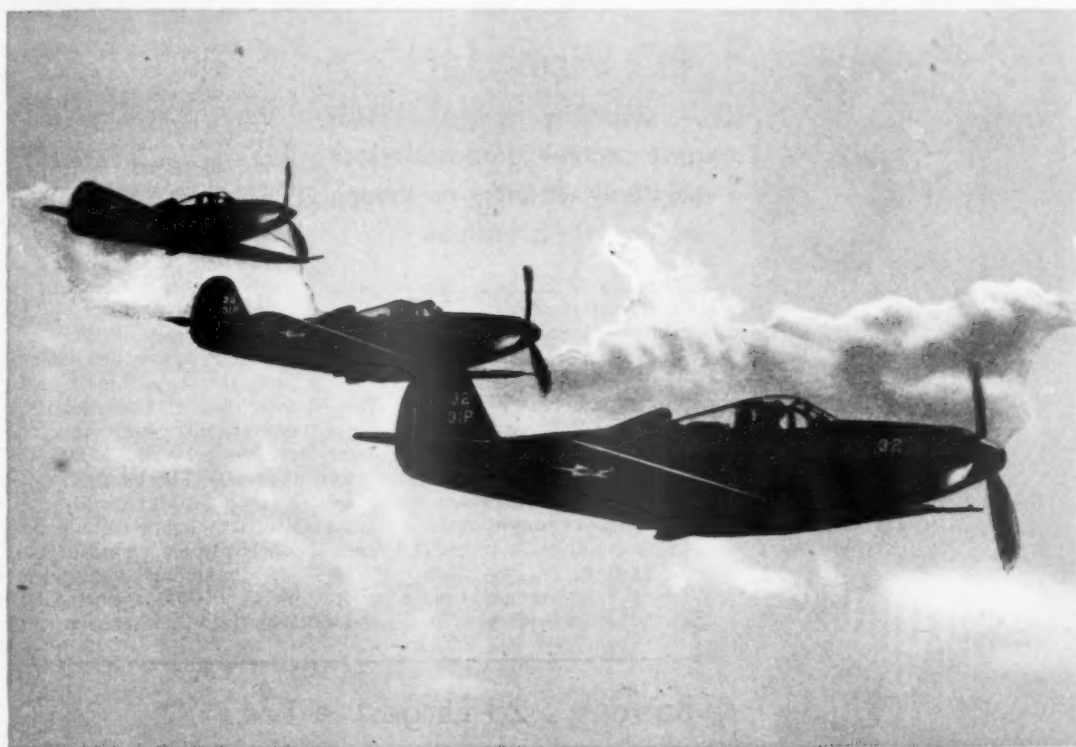
This feeling among nonferrous producers resulted a year ago in a "stockpiling" bill introduced by Sen. James C. Scrugham of Nevada, providing for a stockpile of domestic metals sufficient to meet the needs of a three-year total war. Originally this provided that U. S. producers, particularly small and marginal producers, should be favored, thus laying down a cushion to ease the postwar shock for them. The State Dept. dealt itself in, insisting that the plan must be broadened to permit buying from "good neighbors," and the bill is therefore still in committee.

• **Pleased With WPB**—The industry is not mad at all the government, though. It is rather pleased with WPB, particularly since WPB moved virtually all nonferrous direction to Denver, center of the nonferrous field. Neither WPB nor War Manpower Commission will yet admit there's any room for a letdown in production or manpower recruiting (BW—Jan. 29'44, p42). Miners are still needed because the western coal industry, badly short, will still snatch them up if the metal mines don't.

• **Tariff Is Urged**—The convention passed resolutions for "free enterprise," against taxation changes that might not take account of its wasting assets, and for a tariff on metals. It was virtually unanimous against general land office proposals that all future metal development on the public domain be by lease, not ownership. Gold mine operators demanded resumption of gold mining.



**Keep them flying — by buying more and more**



*Courtesy of Bell Aircraft Corp.*

# WAR BONDS



**The Cardineer** at the turn of a wheel parades the information on 6000 cards. It's FAST in giving necessary facts and figures.



THE finest and most patriotic thing that most of us can do is to buy War Bonds. Each of us would like to do much more to support our brave flyers on the world battle fronts but, buying War Bonds—that's something both vital and within our power. And, how wonderful it does make one feel to know he's doing his bit. So, keep on buying War Bonds, week after week, month after month. ● Many business houses have found that the Cardineer does its bit, too. For it actually saves manpower—cuts operations 40% to 60%. Files, finds and posts records in jigtime. One girl can operate one unit of 6,000 easy-to-find cards. Portable, Compact, and Available *now* in four different models. Write us.

DIEBOLD, INCORPORATED • CANTON 2, OHIO

## DIEBOLD

*"Systems to Fit the Routine"*

**CARDINEER**

**TRA-DEX**

**FLEX-SITE**

ROTARY FILES

VERTICAL VISIBLE FILES

VISIBLE BOOKS

**SOLVE THE PROBLEM • SPEED THE WORK • REDUCE THE COST**



★



Photo from  
DOUGLAS AIRCRAFT

The Punch and Power  
OF  
**1/4 IN. SKILDRILLS**  
MAKE TOUGH JOBS EASY...  
EVEN FOR WOMEN WORKERS!

★ If you want to learn about SKIL-  
DRILLS, ask men or women work-  
ers in America's leading plane plants.  
You'll get the same answer from both:  
SKILDRILLS pack a world of  
power for fastest drilling on  
toughest jobs... yet they're  
light and they feel right for easy  
day-long operation. And you'll  
hear Management praise SKIL-  
DRILLS, too. They cost no more  
than ordinary drills, yet they  
cost less to operate and stand  
up longer under hardest usage.

If you've got 1/4 in. drilling  
to do in your own plant...  
put SKILDRILLS to work right  
now. You'll show immediate  
savings in minutes, money  
and manpower on every job.  
Phone your distributor now!

SKILSAW, INC., CHICAGO 30  
Skilsaw Tools are sold by leading distribu-  
ters of hardware and industrial supplies

**SKILSAW**  
PORTABLE ELECTRIC  
**TOOLS**

MAKE AMERICA'S HANDS  
MORE PRODUCTIVE!



SKILSAWS



DRILLS



DISC SANDERS



BELT SANDERS



PORTABLE AND  
BENCH GRINDERS



BLOWERS



FLOOR SANDERS

★

## FINANCE (THE MARKETS—PAGE 118)

### SEC Visits Jack

But Cleveland war plant  
won't register proposed stock  
voluntarily. It looks as though  
Jack has hit the jackpot.

Securities & Exchange Commission  
field agents this week were looking into  
the proposed stock issue of Jack &  
Heintz, Inc., in Cleveland (BW—Jan.  
15'44, p32).

● **Only by Force**—William S. Jack,  
president of Jack & Heintz, was too  
occupied with other business to confer  
with SEC agents, but his attorney let  
them know that the company had no in-  
tention of registering its new stock issue  
with the commission unless it is com-  
pelled to do so.

Refusal to register might place Jack in  
a vulnerable spot. If SEC could show

that one stock purchaser lives outside  
Ohio, or that the mails were used in any  
phase of the stock selling process, federal  
penalties could be applied.

● **He Was Careful**—Jack apparently in-  
tends to avoid both contingencies.  
Forms suggesting subscriptions to the  
Jackco postwar chest (BW—Jan. 22'44,  
p92) were circulated in the plants and  
were carefully limited so that not more  
than one form got into the hands of any  
worker.

From copies of these forms, which  
SEC agents were studying, conclusions  
from simple arithmetic tend to agree  
with Jack's most recent and most  
optimistic figures: stock subscriptions  
totaling between \$20,000,000 and \$30,-  
000,000. This would give the company  
a much broader investment base upon  
which to figure its side of any future  
renegotiation. (One of the renegotia-  
tors' arguments in assessing a penalty  
of \$7,000,000 against Jack & Heintz  
recently was that the company had

### Banking's 25 Largest in 1943

Flow of funds from New York to  
war production centers is well illus-  
trated by year-end banking statistics  
just compiled by The American  
Banker, banking's daily paper.

The nation's 25 largest banks, as a  
year ago, are still headed by New  
York's Chase and National City, and  
three other Gotham banks advanced

their ranking. However, the Guaranty  
Trust Co. has lost its No. 3 spot to a  
West Coast institution. Also, the  
other eight New York banks in the  
list all slipped back one or more  
places due to the gains, or at least  
maintenance of earlier positions, by  
many other institutions located else-  
where in the country.

Position Dec. 31'43		Deposits on Dec. 31 1943	1942	Position Dec. 31'42
1	Chase National (New York).....	\$4,375,600,000	\$4,291,500,000	1
2	National City (New York).....	3,733,600,000	3,555,900,000	2
3	Bank of America (San Francisco)...	3,498,200,000	2,586,100,000	4
4	Guaranty Trust (New York).....	2,903,800,000	2,698,300,000	3
5	Continental Illinois (Chicago).....	2,174,000,000	2,052,100,000	5
6	First National (Chicago).....	1,803,700,000	1,676,800,000	6
7	Bankers Trust (New York).....	1,594,700,000	1,504,700,000	8
8	Mfrs. Trust (New York).....	1,580,900,000	1,322,400,000	9
9	Central Hanover (New York).....	1,477,200,000	1,537,500,000	7
10	First National (Boston).....	1,248,000,000	1,061,400,000	11
11	Chemical (New York).....	1,154,000,000	1,199,400,000	10
12	National Bank of Detroit.....	1,140,200,000	994,100,000	12
13	Security-First Nat'l (Los Angeles)...	1,104,700,000	806,500,000	16
14	Bank of the Manhattan Co. (N.Y.)...	974,300,000	939,400,000	13
15	Irving Trust (New York).....	964,100,000	928,500,000	14
16	First National (New York).....	942,400,000	887,300,000	15
17	Cleveland Trust.....	792,800,000	554,600,000	20
18	Philadelphia National.....	710,700,000	678,400,000	17
19	J. P. Morgan & Co.....	709,000,000	666,100,000	18
20	New York Trust.....	689,200,000	628,800,000	19
21	American Trust (San Francisco)....	618,300,000	454,700,000	24
22	Corn Exchange (New York).....	604,400,000	531,700,000	21
23	Northern Trust (Chicago).....	519,700,000	459,200,000	22
24	Savings Banks Trust (New York)....	517,100,000	249,400,000	46
25	Mellon National (Pittsburgh).....	490,600,000	459,200,000	23



# Surfacing WITH Discs

IN airplane production for Victory there are countless grinding operations where Norton Grinding Wheels contribute to the speed so vital now.

Here is one of them.

Norton Discs are available in all sizes and types of mountings necessary for grinding airplane parts—in vitrified, resinoid, shellac and silicate bonds—in Alundum abrasive for steel and malleable iron—in Crystolon abrasive for aluminum castings, brass, bronze and gray iron.

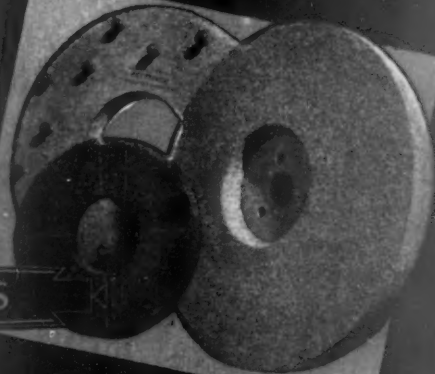
**NORTON COMPANY, Worcester 6, Mass.**

Behr-Manning, Troy, N. Y., is a Norton Division

*Photo Courtesy,*  
Douglas Aircraft Company, Inc.

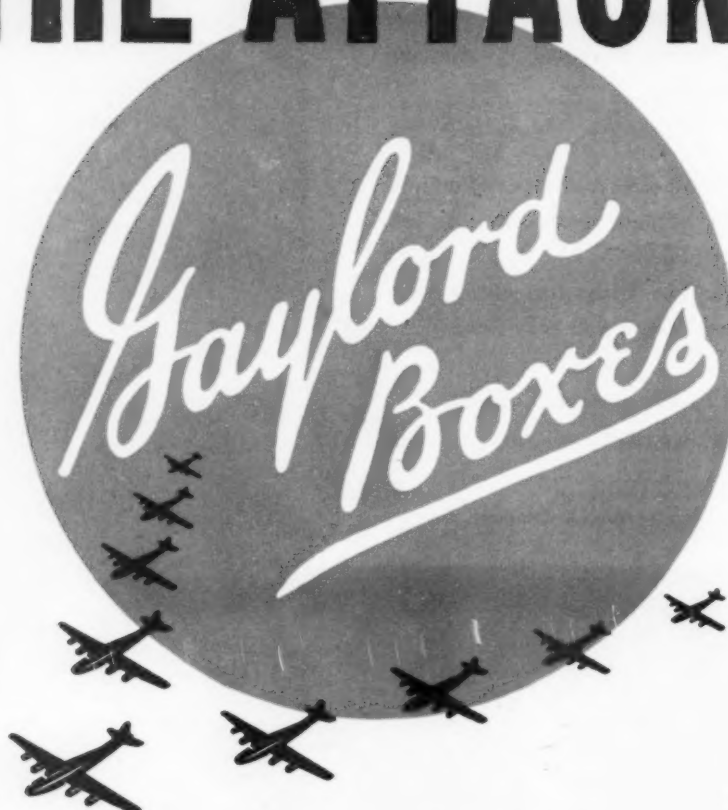


NORTON ABRASIVES





# BACK THE ATTACK



**Buy MORE War Bonds now  
so you can buy even better  
GAYLORD BOXES  
in the future**

## **GAYLORD CONTAINER CORPORATION**

**General Offices: SAINT LOUIS**

**CORRUGATED AND SOLID FIBRE**

*Also Gaylord Folding Cartons... Grocery Bags and Sacks... Kraft and Specialties*

New York • Chicago • San Francisco • Atlanta • New Orleans  
Jersey City • Seattle • Indianapolis • Houston • Los Angeles  
Oakland • Minneapolis • Dallas • Jacksonville • Columbus • Tampa  
Fort Worth • Detroit • Cincinnati • Des Moines • Oklahoma City  
Portland • Greenville • San Antonio • Memphis • Kansas City  
Milwaukee • Bogalusa • Weslaco • Greensboro

been built up from an original investment of only \$100,000 in 1940.

• **"Works Both Ways"**—Jack has been telling his "associates" that the company's slogan, "One for all and all for one," works both ways. Management has been doing for labor, and now labor is doing for management.

Few employers would have the nerve to ask as much from their labor as Bill Jack is asking and, to all appearances, getting. The circular, to be signed and returned by each associate—purely voluntarily, of course—authorizes payroll deductions, for a period of one year, of all Sunday pay, the Christmas bonus, all deductions previously made for war bonds, and all monthly production bonuses.

• **Runs Into Money**—Women associates who have been on the job a year or so at Jack & Heintz are likely to receive a base rate of about \$1.15 an hour. They work ten hours a day, seven days a week. On this basis, figuring conservatively an annual salary of \$4,800 a year, on which a 10% war bond deduction would be converted into a stock subscription deduction, plus the other deductions the company suggested, a woman associate might subscribe for \$2,703 worth of stock. Here are the figures:

Sundays at double time (\$2.30 an hour for 50 Sundays) .....	\$1,150
Two Sundays of vacation period at base pay .....	23
Christmas bonus (\$50 a month for each month on payroll during year) .....	600
War bonds (10% of \$4,800) diverted to stock subscription .....	480
Monthly production bonuses (\$37.50 cash value war bond each month) .....	450

Total for one worker .....

• **Men Get More**—Male workers average higher base pay than women; also they work twelve-hour shifts rather than ten-hour shifts, seven days a week. But if \$2,703 is a fair average for all Jack & Heintz' 7,600 employees, total stock subscriptions to be deducted from their pay during the next twelve months would total \$20,542,800.

On top of these suggested payroll deductions, the circular also had a blank for cash subscriptions. A number of associates were reported to have cashed war bonds in order to put cash into the jackpot, others to have mortgaged their homes. Jack, however, said he didn't want money from mortgages. He thought he would get about \$30,000,000 without such drastic measures.

• **Story on War Bonds**—In return for their subscriptions, associates are to receive nonvoting preferred stock, possibly at 2% annual dividend rate, non-negotiable and nontransferable. If any associate leaves Jack & Heintz before



original invest  
1940.  
Jack has been  
at the com  
and all for  
management  
and now labor  
e the new  
labor as Bill  
appearances  
signed and  
purly vol  
payroll de  
e year, of  
as bonus  
le for war  
production  
associates  
a year or  
to receive  
an hour  
even days  
ing com-  
\$4,800 a  
deduc-  
a stock  
he other  
ested, a  
cribe for  
are the  
an  
\$1,150  
at  
23  
600  
480  
450  
\$2,703  
aver-  
; also  
than  
But  
Jack &  
stock  
their  
onths  
payroll  
blank  
er of  
shed  
into  
aged  
he  
He  
00,-  
for  
re-  
ssi-  
on-  
my  
ore

stock is issued, he is to get his money back at 14% interest. Otherwise, stock is to be considered full payment for the payroll deductions.

To answer in advance any criticism for converting war bond deductions into stock subscriptions, Jack said the company was buying war bonds with a large proportion of its newly invested capital. Half the company's earnings, he said, would be earmarked for dividends on the preferred.

• **Divided Opinion**—Some outsiders thought Bill Jack was selling out his company to his workers, in a way that would provide for buying up the plants it now operates under Defense Plant Corp. ownership. Others thought he had hit the jackpot again with a piece of low-cost financing, designed to "wean the war baby" at the least possible risk of postwar mortality.

## Dividends Gain

Last quarter's increases shove 1943 total well ahead of previous year. Oil makes good showing in December.

American corporations paid out cash dividends of over \$710,000,000 in December, according to a compilation just issued by the Dept. of Commerce. This was an increase of about 5% over December, 1942, accounted for mainly by the oil industry's more liberal treatment of stockholders.

• **Rails Pay More**—As a result of last quarter gains, total 1943 cash disbursements to stockholders came to around \$3,541,000,000, slightly ahead of 1942's \$3,529,000,000. Manufacturing corporations alone paid out \$1,813,000,000 compared with \$1,790,000,000 in 1942.

Railroads, despite the fact that total Class I net earnings last year undoubtedly ran below 1942 levels (BW-Jan. 22'44,p78), raised their dividends some \$24,000,000 in 1943 to the \$177,400,000 mark. The miscellaneous group, dominated by the motion picture industry, also paid out more in 1943 than in 1942.

• **Some Less Generous**—Some other major industries, including communications, finance, mining groups, and heat, light, and power utilities, were a bit less generous in 1943 to their stockholders.

Of the 845 issues of common stocks listed on the New York Stock Exchange at the close of 1943, dividends were paid on 687 last year, compared with 659 in 1942. Also, holders of 192 received larger dividends than in the previous year, and 362 showed no change in dividend rate.



A 50-caliber bullet tears through the recoil mechanism of an anti-tank gun far out on a foreign desert. The gun is out of action—but not for long. Spare parts are rushed up from the supply base, and soon the gun is blasting away again.

But what if these new parts don't fit? What if they are a trifle too large or too small? The answer is all too obvious.

Interchangeability of parts for all kinds of war equipment can be assured only by the careful inspection of every critical dimension with reliable gaging instruments before these parts are shipped to our fighting forces.

**SHEFFIELD is a Recognized Authority on Dimensional Control, producing the gages that assure the interchangeability of manufactured parts.**







## Work Horses OF THE WATERWAYS

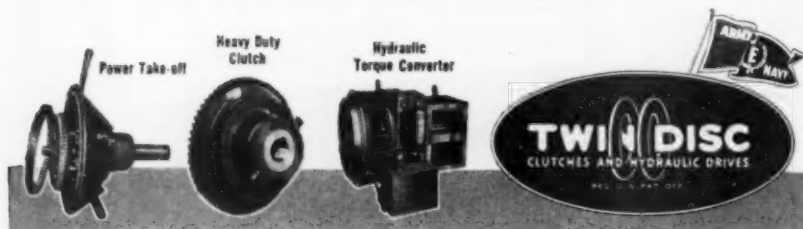
Tow boats, ferries and barges may lack glamour, but the important jobs they do make the world's waterways much more useful than they would be otherwise. Our transportation system would be seriously disrupted if modern work-boat equipment were unable to absorb a great deal of punishment.

Among the power links developed by the Twin Disc Clutch Company in the past quarter-century is the Twin Disc Marine Gear. To work-boat operation, this Marine Gear brings the same high degree of stamina, reliability and efficiency characterizing Twin Disc's solution to so many other industrial

power linkage problems. Enabling work-boats to do a better job, the skill and experience represented by this Twin Disc product thus takes all of us a step further along the road to better living.

Any user or builder of equipment involving driving and driven units can benefit from Twin Disc Clutch Company's specialized knowledge. You follow the example of many alert, successful manufacturers when you get the help of Twin Disc engineers on clutch problems. Their suggestions and advice cost you nothing. So write today for details showing what our products can do for you. **TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).**

*Twin Disc Marine Reverse and Reduction Gears provide boat operators with the wider margin of safety which positive control and increased maneuverability assure. Their rugged construction, smooth operation and long wear life give unexcelled reliability.*



## New Issues Due

When the war bond drive is completed, a brisk market in utility and industrial refunding is expected by Wall Street.

The Fourth War Loan Drive has temporarily dried up the market for new corporate offerings, but many Wall Street underwriting houses, even though busy on war bond sales, aren't neglecting the preparatory work necessary to getting a number of contemplated financing operations in shape for quick offering.

• **Utilities to Lead**—And there are increasing signs now that corporate offerings after Feb. 15 may be quite brisk. Utility issues probably will continue to dominate the coming list of offerings. However, the industrial group will be well represented.

Phillips Petroleum Co., which recently retired the last of the \$20,000,000 issue of 1½% ten-year convertible debentures it sold in January, 1941 (after a goodly amount had been turned in for stock), has about completed plans to sell \$40,000,000 new debentures, probably a 2½% 20-year issue. Proceeds of this offering will be used to retire Phillips' \$14,000,000 outstanding bank loans and replenish working capital following some \$40,000,000 to \$50,000,000 of capital expenditures in 1943.

• **May Refund Issue**—Also, the Street will be surprised if Allis Chalmers Mfg. Co. doesn't take steps soon to refund (with a saving in interest charges) the \$15,000,000 of 4% debentures now outstanding.

For public offering as soon as the government financing is out of the way, several issues already are registered with the Securities & Exchange Commission: \$16,500,000 Florida Power Corp. first mortgage bonds; \$4,300,000 Central Ohio Light & Power senior mortgage issue; \$5,000,000 Northern States Power first mortgage bonds; and 400,000 shares of Central Illinois Electric & Gas common stock, which the parent Consolidated Electric & Gas Co. is disposing of in accordance with its plan for complying with the holding company law. • **Merger Expected**—Three banking groups are prepared to compete for the new financing in connection with the expected merger of Virginia Electric & Power and Virginia Public Service. This would involve the sale of a \$24,500,000 issue of 3½% first mortgage and refunding bonds, and may be one of the first offerings in late February.

Ohio Edison Co. soon is expected to acquire Pennsylvania Power Co., and



ue  
d drive  
arket in  
unding  
et.

has tem-  
for new  
y Wall  
though  
glect-  
ssary to  
lated fi-  
or quick

are in-  
te offer-  
e brisk,  
tinue to  
terings,  
will be

ich re-  
00,000  
deben-  
after a  
in for  
ans to  
prob-  
eds of  
e Phil-  
bank  
al fol-  
000,-  
3.  
Street  
Mfg.  
efund  
the  
v out-

e gov-  
way,  
with  
ission:  
first  
ntral  
tgage  
ower  
shares  
com-  
sol-  
osing  
com-  
law,  
king  
the  
the  
& C  
This  
000  
re-  
the

l to  
and

1944

then engage in a refunding operation involving its own presently outstanding \$78,500,000 of 3½% and 4% first mortgage bonds and Pennsylvania Power's \$8,500,000 senior funded debt. Halsey, Stuart & Co. is reported to be forming a group to compete for the new bonds.

• **New Issues Planned**—Oklahoma Natural Gas also has just announced that it has about worked out a financing operation and will register soon new bond and preferred stock issues to replace the \$20,500,000 3% and 3½% first mortgage bonds and \$10,350,000 of preferred now outstanding.

Electric Power & Light is busily engaged with plans for refunding various subsidiary obligations, including \$17,500,000 Louisiana Power & Light 5% first mortgage bonds; \$16,000,000 similar Mississippi Power & Light 5s; and some \$30,000,000 of New Orleans Public Service funded debt.

The \$38,000,000 Michigan Consolidated Gas 3½% first mortgage issue originally scheduled for offering at competitive bidding in December but delayed by Detroit's passage of a special 20% excise tax on utility revenues (BW-Dec.11'43, p105) is still being kept alive by periodical amendments deferring the effective date of the registration statement.

• **Blow to Underwriters**—Rejection of the Niagara Hudson Power consolidation plan late last month by New York's Public Service Commission was a sad blow to underwriters. However, the commission does not share their views that this postpones for a long time refunding some \$200,000,000 of subsidiary debt.

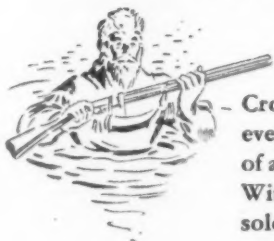
• **Separate Refundings?**—In discussing the proposed operation, which the management estimates would save some \$1,800,000 in yearly interest, the commission said that it had not been established "that some substantial part or all of these savings . . . could not be accomplished by separate refundings by the existing corporations." Consequently, feelings of the new issue houses in this connection may eventually prove to have been a bit too pessimistic.

## FDIC IS IN GOOD SHAPE

The Federal Deposit Insurance Corp. is in a financial position that should enable it easily to care for any postwar demands that may develop, its chairman, Leo T. Crowley, believes. In a recent report, he made this prediction "even though we cannot forecast banking developments during the postwar period that will affect the assets of FDIC."

On its tenth anniversary, Jan. 1, FDIC was guarding the funds of more than 75,000,000 bank depositors. In this decade, over \$255,000,000 was dis-

# Fording a Stream 1944 STYLE



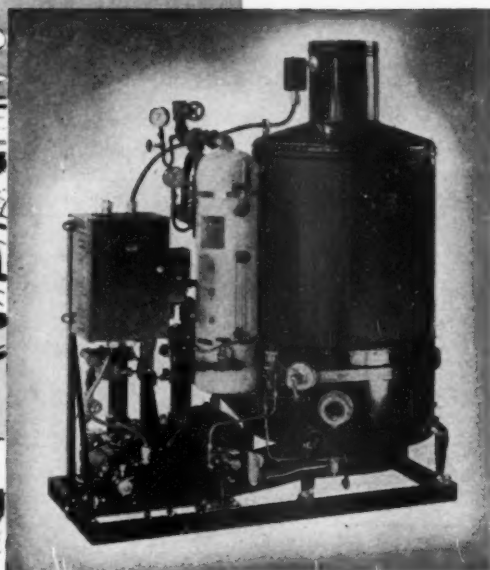
Crossing a stream is no longer a matter of every man for himself, but the responsibility of a group of engineers and Michaels Trestles. With unbelievable speed these specially trained soldiers place their Michaels Trestles and erect a military bridge sufficiently sturdy to carry thousands of men and heavy mobile equipment toward their objectives. ¶ Michaels is happy to have a part in the production of these and other war essentials, and until victory is won, all the resources of this organization will continue to be engaged in war work. When the time comes to think about peacetime needs, Michaels will resume the manufacture of Bronze Tablets, Time-Tight Exhibit Cases, MI-CO Parking Meters and other products of ferrous and non-ferrous metals.

**The MICHAELS ART BRONZE CO., Inc.**  
COVINGTON, KENTUCKY

Manufacturers since 1870 of many products in Bronze, Aluminum and other Metals



# THE Sweetheart HE TAKES WITH HIM



Not so cute and cuddly as the girl he leaves behind, but she helps keep him warm and well, everywhere from Attu to Zanzibar. It is natural for him to be steamed up over this little number that supplies hot food, and water for washing clothes, doing dishes, and provides steam for a dozen other requirements aboard ship. Trim, lightweight and compact—Clayton Flash Type Steam Generators are sailors' sweethearts on fifteen types of fighting and patrol vessels.

These Clayton Boilers use only one-third the space and weigh one-quarter as much as conventional marine boilers. They come to full working pressure in five minutes, adjust themselves instantly and automatically from full load to heating a few gallons of water, are impervious to shock and explosion proof.

Clayton Steam Generators handled hundreds of industrial jobs before going on Navy duty. After the war they will again be available to provide quick, efficient service in civilian life. If you will need 15 to 150 H.P. at operating pressures of 10 to 150 pounds, we suggest you investigate the many advantages of Clayton Flash Type Boilers.

**OTHER CLAYTON PRODUCTS** now aiding the Armed Forces are Kerrick Kleaners . . . Kerrick Cleaning Compounds . . . Hydraulic Dynamometers . . . Feather Touch Valves and Boring Bars and Holders.

# CLAYTON

## MANUFACTURING CO.



ALHAMBRA  
CALIFORNIA

bursed by FDIC (which thinks 80% of this is recoverable) to protect 1,500,000 depositors in 395 insolvent banks.

The corporation's capital and surplus stood at \$700,000,000 on Dec. 31. This is about 2½ times the original figure.

Crowley also said that if the corporation had to be liquidated today, it could repay in full the assessments paid by insured banks and the capital subscriptions of the Treasury and Federal Reserve, plus a 14% dividend to the Treasury on its holdings of FDIC stock.

## 'Phone Tolls Cut

Night rates will go into effect an hour earlier; users of teletype also to participate in \$8,000,000 annual saving.

American Telephone & Telegraph Co., which announced the largest rate cut in the history of the Bell system about a year ago, has just agreed to another slash in the cost of interstate service—this time an annual saving of about \$8,000,000, starting Mar. 1.

• **Back an Hour**—About \$5,600,000 of the reduction will be accounted for by placing present night rates in effect at 6 p. m., instead of 7 p. m. The remainder of the savings will accrue to users of Bell's teletype service (the U. S. government principally, since it now provides 50% of teletype traffic); overtime rates on interstate messages will be reduced.

A year ago A.T.&T. reached an agreement with the Federal Communications Commission to cut the nation's long-distance telephone bill some \$34,700,000. But this didn't satisfy FCC Chairman James Lawrence Fly, especially after he learned that in the first three months the new rates were operative, long-distance revenues (because of continuing expansion in traffic) dropped only \$4,000,000 (BW—Sep. 4 '43, p. 106).

• **Surcharge Dropped**—Consequently, FCC (which has full jurisdiction over long-distance rates) initiated further negotiations almost immediately, and the cut just announced was the result.

This reduction does not include the \$1,700,000 yearly savings for telephone users expected to result from the elimination, effective Feb. 15, of the so-called surcharge collected on toll calls by hotels, clubs, etc.

## GROCERY MERGER

In 1942, the grocery-jobbing trade learned for the first time that two of its big units, Sprague Warner & Co., originally established in Chicago in 1862, and the C. D. Kenny Co., founded in



ts 80% of  
1,500,000  
ks.  
and surplus  
31. This  
al figure.  
e corpora-  
it could  
aid by in-  
subscrip-  
deral Re-  
to the  
C stock.

ut  
o into  
ers of  
ate in  
g.

elegraph  
est rate  
system  
d to an-  
te serv-  
f about

000 of  
for by  
fect at  
remain-  
users of  
govern-  
provides  
e rates  
duced.  
agree-  
cations  
long-  
4,700-  
Chair-  
lly af-  
three  
rative,  
f con-  
opped  
106).  
ently,  
over  
er ne-  
d the

e the  
hone  
limi-  
alled  
ho-

rade  
f its  
righ-  
862,  
d in

944

Baltimore in 1870, had joined forces as the Sprague Warner-Kenny Co., with headquarters to be maintained in Baltimore. It was evident that further expansion was planned since the new company soon absorbed two well-established southern factors in its line.

Also, last December the company offered to buy from holders at \$17.50 per share all the \$20-par common stock of Western Grocer Co. As a result, it is now in a position to announce the purchase of control in that company, which operates 15 long-established Iowa, Minnesota, Missouri, and Kansas jobbing houses and is, as well, a good-sized canner of vegetables.

Because of these moves, Sprague Warner-Kenny is now believed to have an annual sales volume well in excess of \$50,000,000, and some in the trade say this may only be the beginning. Moreover, there are those, too, who think the company has a particularly close relationship with the Commercial Credit Co. of Baltimore, one of the nation's two largest factors in the commercial banking field, and that no public financing to take care of any past or future acquisitions is likely to be seen.

P. S.

Holders of General Mills, Inc., preferred shares voted late last month to approve the management's recent request (BW-Jan.8'44,p109) for authority to issue \$20,000,000 of ten-year debentures to provide for carrying out present and postwar "stability and expansion" plans. . . . As expected, American Distilling Co. stockholders living in some of the states with strict liquor laws are now having trouble collecting the whisky recently offered them at cost (BW-Jan.1'44,p99). In Massachusetts, for example, the ABC commission has ruled that those owning the shares who are not licensed wholesalers or importers can neither import nor arrange to import their "drinkidend." Liquor retailers are also barred from getting the whisky for their own use or sale, and licensed wholesalers have been ordered to report all shipments or consignments of the whisky in question. . . . Western Union reports the recent retirement of all the \$12,563,000 owed the Reconstruction Finance Corp. by Postal Telegraph at the time the two telegraph companies merged (BW-Oct.2'43, p105). Despite recent Wall Street stories to the contrary, the company is not apt to acquire American Telephone & Telegraph's teletype system for some time to come. It is believed that A. T. & T. will want at least \$25,000,000 for this facility, and many now wonder where Western Union could dig up that amount.

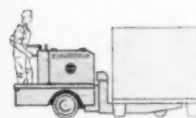


# NEW Baker Truck Catalog

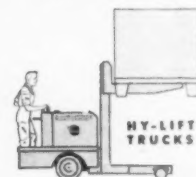


## GIVES THE ANSWERS TO YOUR MATERIAL HANDLING PROBLEMS

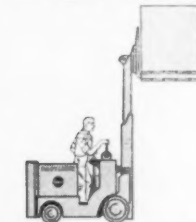
Here's real help for any plant or warehouse faced with transportation problems. The Baker Electric Truck Catalog No. 52 is a handbook of information on material handling, designed to facilitate selection of the proper equipment for any set of requirements. In addition to describing the 47 standard Baker Electric Trucks, it covers many special models designed for unusual handling operations.



LOW-LIFT TRUCKS



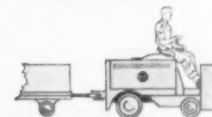
HIGH-LIFT TRUCKS



FORK TRUCKS



CRANE TRUCKS



TRACTORS



PLATFORM TRUCKS

Many actual case histories show Baker Trucks speeding production, saving time and money and conserving man-power in a wide variety of installations. You are almost sure to find problems comparable to those in your plant, and you can profit from the experience of others in solving them.

• • •

Plant and production managers, traffic managers, superintendents, purchasing agents and any others concerned with material handling will find this book a valuable source of information. Write for your copy today.

**BAKER INDUSTRIAL TRUCK DIVISION**  
2164 WEST 25th ST. of the Baker Raulang Company CLEVELAND, OHIO  
In Canada—Railway and Power Engineering Corporation, Ltd.

# Baker INDUSTRIAL TRUCKS



Error-Proof Tracings in Minutes

## HUNTER Electro-Copyist

If the Hunter Electro-Copyist did no more than eliminate painstaking hand tracing and checking, it would still be hailed as a great time saver in overworked drafting rooms. But the Hunter Electro-Copyist does much more—it makes clear, error-proof, smudge-proof copies of anything printed, written or drawn—as many as you want, as quickly as you want them.

With a flick of the switch it reproduces pages of specification or technical text, including illustrations, signatures, notations. It's so simple your office boy can operate it. Send today for descriptive booklet.

Send  
for this  
Valuable  
Booklet



All sizes of  
models from port-  
able to custom-  
built.

HUNTER ELECTRO-COPYIST, INC.  
107 E. Fayette St. Syracuse, N. Y.



## LEWIS BOX TRUCKS

Yes... in hundreds of factories producing essential material you will find these sturdy, long-life box trucks doing a real job of handling light weight, bulky materials or parts.

The strong framework is reinforced at points of greatest wear and strain... the woven-wood-and-wire panels offer a resilient "flexible-strength" that defies the abuse encountered under today's production schedules... Send for complete information about Lewis Box Trucks.

G. B. LEWIS COMPANY, Dept. W2, Watertown, Wis.

**LEWIS**  
INDUSTRIAL CONTAINERS

# PRODUCTION

## Steel Shells O.K.'d

Development was tedious, but both Army and Navy deviate from brass in cartridge cases for special uses.

Steel shell and cartridge cases should not be sold short; their really extensive use is still a possibility in this war and almost a certainty in the next.

Navy is going right ahead with steel cases for its 40-mm., 20-mm., and 3-in. shells, all antiaircraft; though Army's experience hasn't been happy, as evidenced by cancellation or curtailment of some 70 contracts (BW—Jan. 1'44, p36), the Army hasn't reverted entirely to brass.

• **In Volume Production**—Steel cases for the 45-caliber ammunition of Army pistols and tommy guns are in volume production by Chrysler, and are authorized for "unrestricted use"—any campaign, any climate.

What's more, Army authorization for unrestricted use is imminent for the 3-in. steel cases for antitank and anti-aircraft shells, made by the Norris

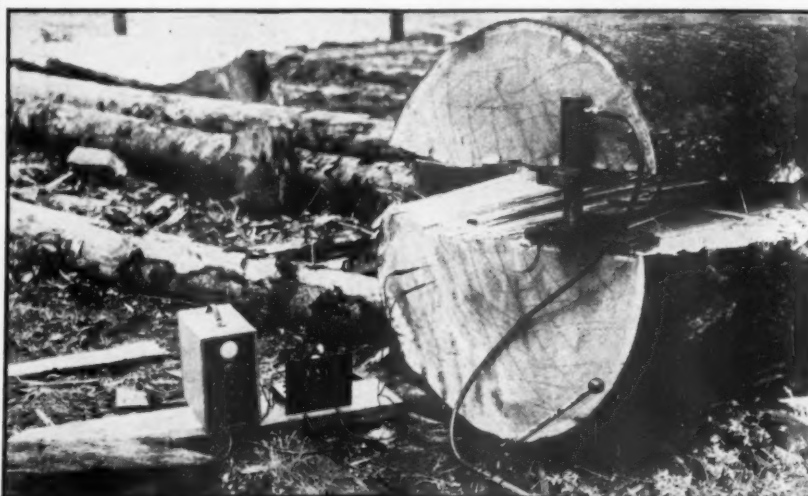
Stamping & Mfg. Co. of Los Angeles (which would also be making them for the Navy, were the Navy's share not temporarily diverted to the Army).

• **Held Its Tongue**—Navy considered publication of its success with steel cases, in the three antiaircraft calibers it has worked on, but feared it might embarrass the Army by implying failure of its program.

Army's reasons for backtracking on the steel shell program are, on their face, quite convincing. Copper and zinc for brass are now more plentiful; even though steel cases are just as satisfactory as brass, the Army argued, it would still not be worth while to change over to steel; brass ammunition plants would have to be converted and a great volume of machine tools replaced.

• **Ejection Debated**—Army officers have been heard to complain that steel cases do not spring back with the speed of brass to original diameter after firing, hence are difficult to eject from the guns. But if you can get down to the technicians who do the shop work, you get a different story.

Technicians insist that steel cases contract and eject as well as brass, if properly designed. Furthermore, in their opinion, as the powder pressures of



## WITH THE GRAIN

Scientific log-splitting plus selective sawmill tactics not only are boosting the yield of Aircraft Lumber Co.'s Montesano (Wash.) mill but are helping conserve the tight supply of Sitka spruce (BW—Jul. 17'43, p58). First, the grain is determined by an oscillograph

(above), then a hydraulic jack—placed at the small end—literally forces the log to split itself into pishaped cants. Each cant is analyzed at the mill, then cut along the true grain thereby producing straight-grain lumber, 90% of which is reportedly passing Army inspection standards as against 40% in shipments conventionally milled.





## *American Seeds of Freedom for Italy*

**A**NTONIO RICCI, Italian, and his family crawl from mountain hide-outs back to bomb-blasted home and fields. With apprehension they watch the big American Army truck jerk to a stop at their ruined doorstep.

But fear changes quickly to joy when the Americans, in halting Italian, explain they have come to help . . . not to demand food and shelter which the Ricci's do not have to give.

Seed for their fields . . . crops for their table . . . food for starved stomachs. Build up . . . not tear down . . . that's the American way of conquest.

American seedsmen, with the cooperation of their Trade Association are supplying through the United States Food Distribution Administration the seed that will turn battlefields into farms again. For a job so splendidly performed, they have earned the Nation's gratitude.

Once more, war-torn people will feed and clothe themselves . . . lift their heads from despotism and become free again.

Bemis is glad to serve an industry which is doing its vital task so well.

**BEMIS BRO. BAG CO.**

GENERAL OFFICES: ST. LOUIS



*Cotton, Burlap and Paper  
Shipping Containers*

23 PLANTS THROUGHOUT THE COUNTRY

**BUY MORE WAR SAVINGS BONDS AND STAMPS**





Whether you go in for  
**FACT or FICTION**  
if you lived in Portland...

## you'd read THE JOURNAL

WHETHER you like biography or blood-and-thunder, history or "who-done-its" . . . regardless of your extra-curricular reading habits, if you lived in Portland your newspaper would be The Journal.

The Journal's publishing formula has made it the preferred newspaper in the Portland area for many years. This formula is no mystery; it is based on time and balance.

In the matter of time the daily Journal as an afternoon newspaper on the Pacific Coast, has a natural time advantage. For when The Journal goes to press it's mid-afternoon in Portland, but it's after six p.m. in New York and midnight or later in much of the rest of the world. The Journal makes the most of its natural advantage and brings its readers the news of all the world—when it is news—the same day it happens.

As for balance . . . Journal editors have for years maintained a popular balance of news and features, have assembled both with an eye to the individual interests of The Journal's hosts of readers. Because Journal editors are active in the life of the community their paper serves; know intimately people in all walks of life . . . they are keenly aware of the needs and interests of their territory.

No wonder The Journal is today, as it has been for years, the preferred newspaper in the Portland Area enjoying the largest circulation in its history.

### The Portland Trading Zone

...is a market of 715,711 people according to the Oct. 1, 1943 figures for Ration Book 2.

...has a population 33% greater than all the rest of Oregon.

...has an industrial payroll that averages over 48 million dollars monthly.

### Here The Daily Journal

... concentrates 130,225 of its 162,923 total circulation . . . the leading medium in Oregon's Only Major Market.



## The JOURNAL

### PORTLAND, OREGON

Portland's Only Afternoon Newspaper

Represented by REYNOLDS-FITZGERALD . . . New York, Chicago  
Philadelphia, Detroit, Los Angeles, San Francisco

modern guns increase, it will be necessary to change over to steel for added strength.

● **In Russian Campaign**—The technicians point out that the Russians are putting about 30% of their ammunition in steel cases, and that the Germans are using them on a large scale, the latter having a case made of steel strip which is wound spirally with the edges flush and not welded.

One thing that eases the ejection problem for the Navy is that offshore temperatures are not likely to climb as high as some of those ashore, hence cases will not expand quite as much; another thing is that Navy can use an oil for rustproofing not available to the Army because it would pick up the dust that is so frequently present in land operations.

● **A Short Draw**—The stub-nosed Chrysler case for 45-cal. pistol and submachine-gun ammunition, now used by the Army, is no easy job to manufacture, but is a "short draw" when compared to the 3-in. Norris case which is about two feet long.

Norris tried to make the cases by progressive cold drawing when requested to do so by Lt. Gen. William S. Knudsen in 1941, and succeeded in making some which called for heat treatment between successive, progressive "draws" from blanks to finished case.

● **Approved for Combat**—After two years of "the toughest assignment ever handed us," the Norris people have been told by Brig. Gen. R. E. Hardy, chief of Army Ordnance's ammunition branch, that their 3-in. shell cases are perform-



One major producer still turning out steel cartridges for the Army is Norris Stamping & Mfg. Co. Symbolical of its success with them is President K. T. Norris' recent presentation of the firm's millionth 3-in. steel case to Lt. Gen. William S. Knudsen.



## BACK THE ATTACK-- IT DRIVES THEM BACK

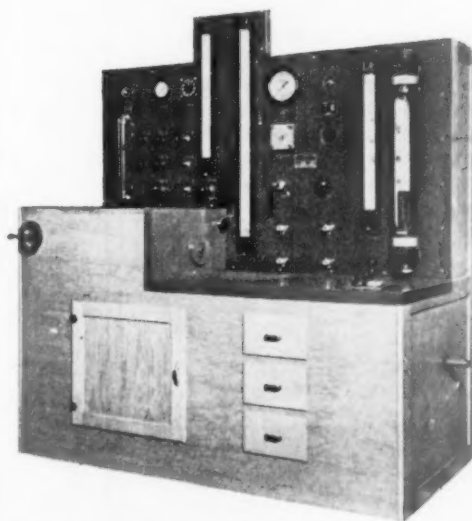


**FREE ENLARGEMENTS** (14" wide) of this cartoon by Edmund Duffy, twice winner of the Pulitzer Prize, are available. Write, on your business letterhead, to: Bruce Livie, President, Liberty Motors & Engineering Corp., Baltimore-1, Md.

Copyright 1944, Liberty Motors & Eng. Corp.

## Manned and Tooled to Turn Out High-Precision Machine Work Electrical Assembly Work

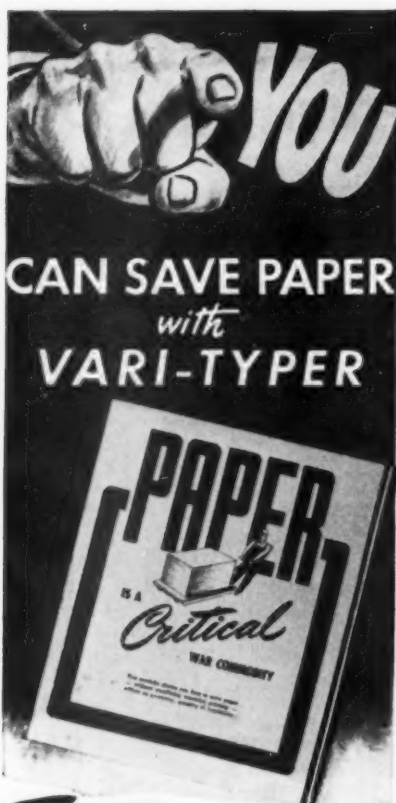
As a manufacturer, Liberty makes highly accurate testing equipment and service tools for aircraft, of which the Aircraft Pump Test Unit, at the right, is just one example. These Liberty products are used by armed forces and governments of the United Nations, as well as by airlines and aircraft plants. In addition, as a sub-contractor, Liberty produces quantities of high-precision machined parts and electrical assemblies for other manufacturers. Liberty is equipped for research in electronics, radio and sound. Maybe Liberty's special skills and equipment can help you. We'll be glad to tell you more about them.



**LIBERTY MOTORS  
& ENGINEERING CORPORATION**  
BALTIMORE-1, MARYLAND

MANUFACTURERS OF AIRCRAFT SERVICE TOOLS AND TEST EQUIPMENT





## **You** CAN SAVE PAPER with **VARI-TYPER**

*This Timely Folder*  
TELLS YOU HOW

It explains how Vari-Typer saves paper, shows actual side-by-side comparisons between typewritten and Vari-Typed forms, bulletins, manuals, etc., lists examples of savings (some run as high as 716,000 sheets of paper annually), and also shows how important savings in ink, stencils, paper plates are made.

Send for your copy now. Or, if you prefer, direct a copy to the head of your printing or duplicating department. Send for as many copies as you need. There's no obligation, of course.



**RALPH C. COXHEAD CORPORATION**  
333 SIXTH AVE. • NEW YORK 14, N. Y.

Send me ☐ copies  
☐ copy of folder "Saving Paper".

NAME \_\_\_\_\_ TITLE \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

ing "equal to or better than brass" and that the branch has recommended to the ground forces the release of this size shell for actual combat use.

Hardy says that Norris was the first of more than 50 companies to get heat-treating equipment installed, and the first permitted by the inspection section to ship steel cases before ballistic tests.

## **Mill to Diversify**

Postwar Pillsbury flour salesmen probably will peddle dry cereals, dehydrated soups. Soybean research is pushed.

For 75 years wedded almost exclusively to producing flour, Pillsbury Flour Mills Co., the nation's second largest miller, has launched an extensive program of diversification under the leadership of its youthful president, Philip Winston Pillsbury.

• **Not Straying**—Unlike its bigger competitor, General Mills, Inc. (BW—Jan.

15'44.p32), Pillsbury isn't stepping out side the food field. After the war, Pillsbury salesmen probably will be peddling dry cereal, dehydrated soups, and possibly some new baking mixes to grocers along with their standard lines of flour, pancake flour, cake flour, etc.

And, in a related field, Pillsbury has just announced creation of a soybean division. Primary effort here will be directed toward animal feed, in conjunction with the company's 18 months old feed mills division, now personally directed by the president. The soybean division includes a plant at Centerville, Iowa, which processed 1,000,000 bushels last year, and a 2,400,000-bushel plant nearing completion at Clinton, Iowa. Soy oil and soy meal are the products.

• **Other Research**—But Pillsbury's announcement of the new division pointedly added, "special soybean research programs are being developed," indicating that attention is being directed not only to its use as animal and possibly human food, but also to potentialities in chemurgy, such as soy plastics.

Production know-how on dry cereal and dehydrated soups has been acquired

## **Now It Can Be Told: Aluminum Castings**

Use of aluminum in castings (data on which now are available for the first time) in 1942 came to 324,000,000 lb., approximately equivalent to this country's total consumption of the metal for all purposes in the largest peacetime year. From the statistics for the first nine months of 1943, it is clear that last year's record was even higher.

Largest increase came in heat-

treated sand castings for cylinder heads and other large parts, this category having risen from a monthly total of 8,129,000 lb. at the beginning of 1942 to better than 22,000,000 lb. in September of 1943. The metal trades are interested, too, in the rise in die castings, a field for heated postwar competition. Shipments (in thousands of pounds, 000 omitted) compare as follows:

	Sand Castings	Permanent Mold Castings	Die Castings	Total
<b>1942</b>				
Jan. ....	12,460	3,879	3,594	19,933
Feb. ....	11,883	3,863	3,965	19,711
Mar. ....	13,729	4,385	5,161	23,275
Apr. ....	15,227	4,483	5,154	24,864
May ....	15,612	4,429	3,969	24,010
June ....	16,525	4,768	4,132	25,425
July ....	17,887	4,545	4,511	26,943
Aug. ....	19,302	5,052	4,746	29,100
Sept. ....	19,715	5,994	4,916	30,625
Oct. ....	21,830	6,480	5,454	33,764
Nov. ....	21,120	6,286	4,938	32,354
Dec. ....	22,188	6,479	5,384	34,051
<b>1943</b>				
Jan. ....	21,875	6,406	4,803	33,084
Feb. ....	22,039	6,516	4,824	33,379
Mar. ....	25,309	7,949	5,477	38,735
Apr. ....	24,296	7,586	5,183	37,065
May ....	24,979	7,667	5,044	37,690
June ....	24,079	6,886	5,332	36,297
July ....	24,672	7,121	5,363	37,156
Aug. ....	25,376	7,178	5,617	38,171
Sept. ....	27,213	7,959	5,672	40,844

Data: Aluminum & Magnesium Division, WPB.



# Free Enterprise

## ... INCENTIVES AND TAXATION



There are three principal ways of making a living:

1. Getting on someone's payroll
2. Lending one's savings to business enterprises
3. Starting, or helping to start, a business enterprise

About three out of four of us fall in the first group—we are *job-holders*. Millions of us get some income, large or small, by lending our savings—directly or through such channels as insurance companies. We are suppliers of *loan-capital*. About one out of four of us has his own business enterprise, and several millions of us are part owners of business enterprises. Those of us who go into business for ourselves and those of us who are part owners of enterprises are *job-givers*.

The amount of employment in a community depends, in the main, on the number of persons who attempt to make their living, or part of their living, by giving jobs to others, rather than by getting on someone's payroll. A community seriously desiring a high level of employment

and a high standard of living will strive to make job-giving attractive and to encourage a large part of its population to be job-givers rather than merely job-holders.

The number of men who attempt to make their living in whole or in part by starting new businesses or by expanding old ones depends upon the outlook for profits. When the outlook for profits improves, thousands of new jobs open up and thousands of men go to work; and, as men go to work, the farmer and everybody else benefits. When the prospect for profits becomes darker, the demand for labor, capital, and raw materials drops. It may be roughly estimated that an improvement in the prospect for profits of one billion dollars raises the demand for labor by anywhere from two billion dollars to five billion dollars.

One of the principal determinants of the outlook for profits is the amount and the nature of taxes. After the war, the Federal government will need to raise each year about twenty billion dollars in taxes—three times the amount required before the war, and six times the amount re-

pping out  
war. Pills-  
e peddling  
and pos-  
to grocer-  
s of flour,  
c.  
sbury has  
a soybean  
will be di-  
conjunction  
months old  
onally di-  
soybean  
nterville.  
0 bushels  
hel plant  
n, Iowa.  
roducts.  
ry's an-  
n point-  
research  
indicat-  
directed  
and pos-  
tential-  
plastics.  
y cereal  
required

nder  
cate-  
r to-  
ing  
lb.  
etal  
rise  
ted  
(in  
ed)

al  
33  
11  
75  
64  
10  
25  
43  
00  
25  
54  
54  
51

4  
9  
5  
5  
0  
7  
6  
1  
4



quired in the Twenties. In the Twenties, the tax needs of the Federal government were roughly twice as large as corporate profits in a good year. After the war, Federal revenue needs will be roughly three times corporate profits in a good year. Obviously, it will be much more difficult, after the war, for the government to meet its needs *without discouraging enterprise*, and therefore without diminishing the number of jobs, than it was before the war. Far more than ever before, it will be necessary for the government in developing a tax program to take account of the effect of taxes upon employment and the standard of living. This means that it will be important for each and every citizen to give attention to these matters—because the policies of the government reflect, in the main, the thinking of the citizens.

Some taxes seriously discourage individuals and business firms from undertaking new and enlarged operations. Other taxes have little or no adverse effect on investments. Some taxes are a burden on consumption, affecting the sales of specific commodities, depending on the nature of the taxes. It is obvious that different kinds of taxes have different economic influences. *We must understand the forces that determine the level of employment and consider the tax*

*program in relation to other measures designed to create more jobs.*

What are the tests of a good tax system?

1. Taxes should be designed to encourage production and enterprise and to make it attractive for a large number of people to earn all or part of their living by giving jobs to others.
2. Taxation must be fair in principle and administration, with no discrimination between persons in similar circumstances.
3. Taxes should be apparent and not concealed, and should be levied, in the main, directly upon individuals so that each of us will know how much our government is costing him. A moderate income tax at the lower income levels will bring a greater awareness of responsibility than will heavy taxes on consumption which the taxpayer does not see because they are hidden in the prices he pays.
4. In the aggregate, taxes should be somewhat progressive.
5. The tax system should be coordinated with the broader objectives of monetary and fiscal policy.



6. Federal, state, and local tax policies should be integrated as to principles and objectives.

Judged by these standards, our present tax system is extremely unsatisfactory; in fact, it is actually damaging. It is a conglomeration of hidden and direct taxes and of conflicting taxing jurisdictions and policies, with no comprehensive economic motive. It is distorted to appease pressure groups and includes uneconomic punitive measures. It is full of needless complexities. It is a paradise for tax lawyers and a source of confusion and despair for the honest, enterprising business man. In fact, it would seem almost as if our tax laws had been written by some fifth columnist for the purpose of making private enterprise unworkable. We in America pretend to believe in the pioneer spirit, but no one would ever suspect it by looking at our tax system.

When the war is over, there must be a thorough reform of our entire tax system. Federal taxes can and should be reduced substantially; and, in the process of reduction, changes can more readily be introduced. At that time, steps can be taken to achieve some degree of coordination and unity of purpose among federal, state, and local taxing agencies. Taxes play too important a role in our total economic life to ignore the adverse consequences of unrelated and inconsistent policies

of different taxing jurisdictions.

The following reform measures are needed in federal taxation:

1. Repeal of the excess profits tax at the earliest possible date after inflationary dangers subside. In the case of most enterprises, the excess profits tax destroys all incentive to do a larger volume of business than in 1939; it appropriates virtually all increase in profits above the level of 1939.
2. Coordinate corporation and individual income taxes so as to avoid double taxation and impediments to risk-taking. Preferably, corporation income taxes should be wholly eliminated. Otherwise, the corporation tax rates should be reduced to the lowest effective rate on personal incomes. Full credit should be given to stockholders for all corporate income taxes paid.
3. Encourage competition and particularly the formation of new enterprises by allowing new corporations generous tax exemptions for a period of five years. Extend the same principle to unincorporated concerns.
4. Encourage risk-taking (and hence job-



giving) through extending the loss carry-over to six years or more.

5. Provide for averaging incomes over a period of years in order to remove discrimination against those with irregular incomes and those who take risks of loss in business ventures.
6. Rely upon the personal income tax as the main source of revenue, with broad coverage. The reduction in total taxes after the war should favor the elimination of excise taxes before reducing income taxes.
7. Reduce the upper range of personal income tax rates to a maximum of perhaps fifty to sixty per cent so that risk-taking investments will be really attractive. Higher rates are punitive in character, yield small receipts, and throttle risk-taking.
8. Encourage risk-taking by individuals in the higher brackets by making the surtax on incomes of \$20,000 a year or more half as much on income in the form of dividends as on income in the form of salaries or interest.
9. Encourage risk-taking by individuals by permitting capital losses to be

charged against general income provided the reduction of tax liability in any one year is not more than fifty per cent.

10. Repeal the tax-exempt privilege for all *new* securities issued by all governmental jurisdictions.
11. Eliminate excise taxes which place a disproportionate burden on persons with lower incomes so as to encourage greater consumption and provide an expanded market for our vast industrial capacity.
12. Reform tax administration to simplify forms and procedures, to broaden the scope of enforcement, and to encourage the spirit of fairness.

With such reforms and continuing reappraisal of the tax program as it affects the economic situation, we can look toward taxation as an instrument of constructive influence in giving the fullest encouragement to free enterprise and in attaining continued prosperity.



President, McGraw-Hill Publishing Company, Inc.





## is it possible to build a rat?

**I**N the answer to this extraordinary question is a curious story. For two scientists once posed that very question to themselves . . . and the answer was Yes!

They actually built a machine with the power to "learn" by experience and "remember" what it had learned—a mechanism capable of simulating the rudimentary behavior of a rat. Comprised of solenoids, gears and relays, it traveled a grooved track forked by 12 dead-end side-tracks—equivalent to the blind alleys which a living rat encounters. Set to take the dead-end forks, as if by an inner compulsion, this robot rat literally learned by experience to avoid the frustrating blind alleys, in a perfect mechanical analogue to the conditioned reflexes of the brain.\*

To build a machine that would reproduce *all* the behavior of a rat "would require a mechanism probably as large as the Capitol at Washington"—*but it could be done!*

For we're at the beginning of an amazing new technological age. Already there are many kinds of thinking machines in our incredibly mechanized world, helping to speed production, cut costs and build better products. And intimately a part of this whole story is the science of machine tool engineering. Today, Jones & Lamson engineers are working with the leading manufacturers in virtually every industry, helping them to plan production *now* for the machines and the products of tomorrow.

They are at your service, too.

\* In "The Advancing Front of Science" by George W. Gray, a memorable chapter on thinking machines reports this story in full.



# JONES & LAMSON

MACHINE COMPANY

SPRINGFIELD, VERMONT, U. S. A. **Profit-producing Machine Tools**

Manufacturers of: Universal Turret Lathes • Fay Automatic Lathes • Automatic Double-End Milling and Centering Machines • Automatic Thread Grinders • Optical Comparators • Automatic Opening Threading Dies and Chasers.





## What Will U. S. Day do to Your Postwar Plans?

**U. S. DAY**...that's Unconditional Surrender Day! Postwar will have arrived! You'll need your working capital in good working condition then ... to put your postwar plans into action at once ... to meet competition.

But who can tell what day war will end? Who can tell which of your present "good risk" customers might be thrown into difficulties by a swift turn of events? What will happen to your plans if Victory suddenly deprives some of your customers of the ability to pay what they owe you? You'll be glad ... *then* ... that you decided to look into credit insurance ... *now*.

American Credit Insurance *guarantees* payment of your accounts receivable. It guarantees, *for a year to come*, that abnormal and unpredictable credit losses will not impair your working

capital ... or your credit ... or your profits. In short, it gives you certainty in place of uncertainty.

Your Credit Manager investigates, appraises and controls credits on all accounts as usual. American Credit Insurance supplements his work and fortifies his judgment ... by protecting you against defaults due to developments after (or undiscovered before) goods are shipped.

Manufacturers and Jobbers in over 150 lines of business carry American Credit Insurance. You need it too. For further information, write for our booklet, "The A-B-C of Credit Insurance," Address: Dept. 42, American Credit Indemnity Co. of N. Y., First National Bank Building, Baltimore-2, Md.

**J. F. McFADDEN,**  
President



## American Credit Insurance

*Pays You When  
Your Customer Can't*

OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

## A WARTIME SUBSTITUTE

Ordinarily, the Dept. of Agriculture would rather take a cut in its appropriation than recommend the use of a mineral to replace a vegetable product. But now it has little choice. There isn't enough corn starch to meet all needs, but there is enough calcium carbonate—a mineral derived in the Solvay process. One or the other, corn starch or calcium, has to be used as a diluent and stabilizer in baking powder.

So the War Food Administration cautiously announces that, as a temporary wartime expedient, it has applied for a patent for using calcium carbonate as a stabilizer in baking powder in place of corn starch. The patent is to prevent monopoly of the substitute by any one manufacturer who might promote its use after the war to the detriment of corn starch.

Last year 50,000,000 lb. of corn starch were used in baking powder alone. War uses for corn starch include processing of aluminum, textiles, paper, and foods. Some of these have a priority over baking powder. Lend-lease requirements are large.

through war contracts. Pillsbury's historic mill at Minneapolis now is largely devoted to manufacture of these items for the Army, which is taking all Pillsbury can turn out.

• **Has Neutral Flavor**—The dry cereal is a premixed, precooked whole wheat and soy food flake, dehydrated and packed in 10-oz. cartons, each sufficient to feed five persons. Mixed with hot or cold water, it is ready to eat, milk solids and sugar having been added in its manufacture. The cereal has what is described as a neutral flavor, but Pillsbury scientists can easily add flavor when civilian palates are to be tickled.

Dehydrated bean and green pea soups are other products developed for the Army in cooperation with the Quartermaster Corps. Five gallons of boiling water added to a 5-lb. package makes servings for 40. And if the public doesn't want its postwar soups dehydrated, Pillsbury can well leave out one production step, substitute cans for cartons, and have soup concentrates.

Pillsbury's Globe Mills division on the West Coast has been successful with a biscuit mix that may be given national distribution.

• **An Innovation**—All these developments have taken place since Philip Pillsbury took the helm about three



years ago. Grandson of one of the company's founders, he was groomed for the job from the time he left college in 1924. He worked in nearly all of its 14 mills, all departments, before becoming treasurer in 1940, president a few months later.

## For Better Milk

Use of stainless steel and wheat germ oil weighed by Army as a protection for milk powder against rancidity.

With shipments of whole milk powder breaking all records, the Army is working on new specifications to minimize rancidity, no small problem with leaky packages and long hauls to the tropics. The new specifications may spur the use of stainless steel equipment and wheat germ oil and pave the way for wider peacetime use of dried milk.

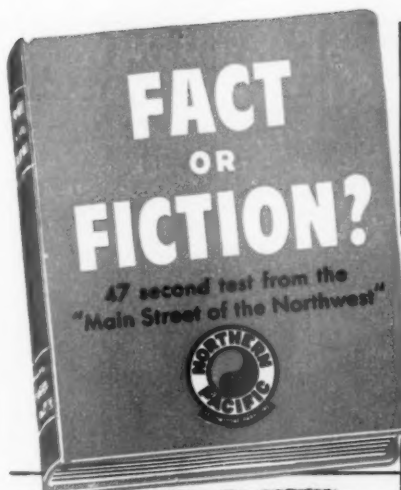
• **Industry Called In**—The Army called milk powder producers to a special meeting at Chicago early this month to perfect specifications sent to them by the Quartermaster Corps in November. The Dept. of Agriculture, also working on new specifications, sent a representative to the Chicago meeting. Meantime the Consolidated Dairy Products Co. of Seattle is making a full-scale commercial test using wheat germ oil.

In bringing production of whole milk powder above 100,000,000 lb. a year—about four times normal—inexperienced producers have entered the field. There is machinery to evacuate the air from milk powder cans—a vital step—for only 50% of U. S. production. Wartime pressure for deliveries does not allow time to evacuate cans and no means has been developed commercially for testing every can for leaks.

• **Time Loss Fatal**—An increase in time spent by the raw milk between cow and drier is fatal to quality, as is copper or iron contamination, even from one short pipe in the drier. Dehydrators can put little additional pressure on dairymen for twice-a-day milk shipments now, but urgently needed stainless steel to get rid of copper in drying is expected to be made more freely available.

Chief speculation centers on the QMC's proposal to permit use of antioxidants to retard rancidity. Antioxidants retard oxidation, or spoilage, of the milkfat, long a handicap in manufacture of whole milk powder. QMC has tested several of these substances without disclosing results.

• **Wheat Germ Tried**—The trade believes the antioxidant used by the Cana-



Q. Venice has no gondola monopoly; thousands are in use in America. Fact or fiction?

A. Fact. U. S. gondolas (open top freight cars) hauled nearly 2 million tons of crushed rock ballast in 1942-3 to improve Northern Pacific tracks.



Q. Canning of fresh food was invented in a French candy shop. Fact or fiction?

A. Fact. In 1809. Perfection of modern canning is found in 2 million cases of Washington-Oregon fruit shipped yearly via Northern Pacific.



Q. Northwest wheat growers grind their own flour for home use. Fact or fiction?

A. Fiction. Farmers buy much of the 400,000 tons of flour—enough for 76,190,476 loaves of bread—hailed yearly by Northern Pacific Railway.



Q. Some farms in N. P. territory wait 50 years for harvest. Fact or fiction?

A. Fact. Lumbermen have registered 2,250,000 acres of tree farms in Washington and Oregon on which they will cut only 50-to-100-year-old trees.



Q. "Main Street of the Northwest" is the name of a novel. Fact or fiction?

A. Fiction. It's the Northern Pacific Railway, known as "Main Street of the Northwest" because it links more of the Northwest's population centers.



# NORTHERN PACIFIC

MAIN STREET OF THE NORTHWEST





## Don't Shoot the Office Manager —he's doing the best he can!

Would you like a printed copy of the above sentiment, suitable for framing? Simply tear off the top of a filing cabinet and—No, don't do that. We have a better idea. If your office is snarled up with the confusion of wartime operations, send for the man who may banish your troubles—

### ART METAL'S "MR. EXPEDITER, O. D."

The "O.D." after the name of this bright character means "Doctor of Offices" . . . skilled and practiced in making office routine more effi-

cient. Naturally, he's now somewhat limited because much of the equipment he'd recommend won't be made until after the war. But, even today, he'll have suggestions that will make your life easier.

And if you're now planning a post-war office layout, an invitation to Art Metal's Mr. Expediter is really a "must". He knows office layout and system. Why not send for him? No obligation. Simply call your Art Metal branch or dealer, or write to Art Metal Construction Company, Jamestown, New York.

#### ART METAL STEEL OFFICE EQUIPMENT

BALTIMORE CINCINNATI  
BOSTON CLEVELAND  
CHICAGO DETROIT

#### Makers of

#### \*WABASH FILING SUPPLIES

\*a subsidiary company



#### POSTINDEX VISIBLE RECORDS

HARTFORD PHILADELPHIA  
LOS ANGELES PITTSBURGH  
NEW YORK WASHINGTON

**Wabash**  
OF INDEXING

**Art Metal**  
Jamestown, New York  
U. S. A.

**POSTINDEX**

**SYSTEMATIZED EQUIPMENT AND RECORDS FOR BUSINESS**

dian Navy in milk powder tablets is most practical, according to evidence in hand. Some time ago, the Canadian Research Council asked Dr. W. D. McFarlane of McGill University to study natural food materials which promised to delay rancidity in milk. McFarlane found that wheat germ oil, containing minute amounts of edible acids, when added to liquid milk before drying in concentrations of one part in 10,000 doubled the life of the resultant milk powder.

As a result of these findings, the Canadian Navy began to use, in emergency rations, this formula made by VioBin Corp. of Monticello, Ill. Dr. P. H. Tracy, specialist in milk antioxidants at the University of Illinois, confirms from his own work that this same formula does retard to a significant extent rancidity in whole milk powder.

• **Practical Aspects**—Wheat germ oil is a natural food, used in amounts so slight that its presence cannot be detected. The Food & Drug Administration knows of no barrier to use of this food in milk powder, for domestic use after the war as well as in exports. Supplies of wheat germ oil are ample, as its use in animal breeding should decline in 1944. No machinery is needed; it is simply homogenized in skim milk, then dumped into the milk to be dried.

## TAKING DRY MILK'S PLACE

Dairymen who have watched with concern the wartime advance of margarine as a substitute for butter are shifting their gaze to the substitutes which bakers, ice cream manufacturers, and confectioners are using for dry milk.

These alternative products are largely of a soy base. Lecithin (a soy product) is used in some of them that range from 30% to 50% protein.

Already on the market are Lacedex, product of Stein, Hall & Co., New York and Chicago, and Supermelk, product of Dawe's Vitamelk Laboratories, Chicago. Other firms which are selling dry milk substitutes in quantities that range from a barrel to a carload include Griffith Laboratories, Chicago, and Charles P. Wagner & Bro., New Orleans and Houston.

What accounts for the shortage of dry milk is that the government has earmarked 75% of it for the armed services and lend-lease. Dry whole milk (which contains cream, as distinguished from dry milk, which does not) is unobtainable by commercial users; it is reserved exclusively for the use of the government.

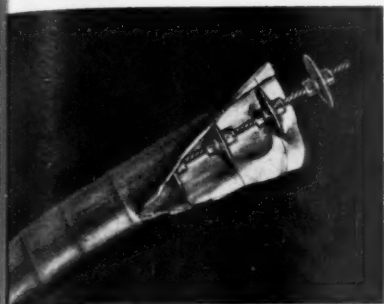
The substitutes sell for one-half to three-fourths the price of dry milk. In many instances, they are replacing from half to all of the dry milk in bakers' bread and other foods.



## NEW PRODUCTS

### Coaxial Cable

Fast production, low costs, and high operating efficiencies are the three principal aims of the Gits Molding Corp., Huron & Kenton Sts., Chicago, in developing its new Plastic-Molded Coaxial Cable. The plastic insulating spacers, or "beads," are automatically formed and molded into exact position on the



central metal conductor by passing it through suitable cavities in an injection molding machine. The plastic tubular covering (shown partially open), which hermetically seals the spaces between the beads, is added in a later operation. A braided outer covering of copper, aluminum, or other metal (not shown), which is added in still another operation, acts both as a protector for the plastic tube and as the exterior coaxial conductor.

Present applications of coaxial cable range from the intercity transmission of television programs and telephone conversations to handling high frequencies for the radios of stratosphere planes. One scientist, not connected with the Gits organization, believes that the postwar period will eventually see the concentric conductors used as "pipelines" to bring high frequencies from central stations into the home for cooking, lighting, telephoning, radio, television, whatever.

### X-Ray Illuminator

Engineers of the Kelley-Koett Mfg. Co., Covington, Ky., report their development of a new High-Intensity Illuminator for viewing industrial X-ray films in detail. Although the light sources are brilliant photoflood lamps, they promise not to heat and damage the film because an inbuilt fan blows cooling air between an inner heat-resisting glass and an outer opal glass on which the film rests.

Unusual added feature is an ultra-high-intensity, water-cooled 3-in. "spot" for inspecting dense and obscure por-

★ cutting down time today...



—means cutting down costs tomorrow!

Today, time is the world's most valuable commodity. Every time a plane is finished . . . every time a tank is turned out . . . we shorten the time between now and "V" Day.

And time will still be vital in the post-war industrial world. Production facilities will be tremendous. Sales will flow to those plants which can produce at low cost.

Here at Acme, our staff engineers are trained to save time for you today and cut costs for you tomorrow. Do you need a special tool? Acme can design and build it. Is there a problem in your production line? Acme engineers may have the answer to that problem.

Acme products, Acme engineers have helped many metal-working manufacturers with their production problems. Why not see what we can do for you?

FOR VICTORY  
BUY  
WAR BONDS  
AND STAMPS

Army-Navy "E" Award  
received Jan. 12, 1943.  
White Star, for continued high production,  
received Oct. 30, 1943.

# ACME

Pattern and Tool Company, Inc.

DAYTON, OHIO

HEAT-TREATED ALUMINUM CASTINGS... PATTERNS... TOOLS  
TOOL DESIGNING... PRODUCTION-PROCESSING

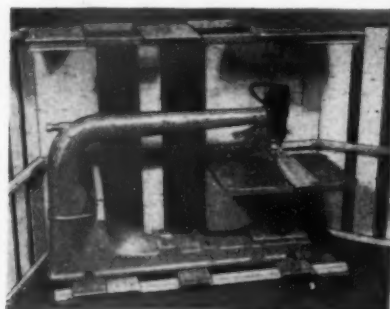




## MAKE THE CONTAINER A PART OF YOUR PRODUCT

To insure safe arrival for your product . . . use "a container that's part of the product." The General Wirebound is just that. It is tailor-made to your particular needs.

This container combines light weight with ample strength. It facilitates rapid packing, and quick and easy handling. It will save as much as 50% tare weight.



The General Wirebound reaches the user two-thirds assembled and an inexperienced man can assemble it up easily and quickly.

Get set now for your postwar shipping — write for further details.

## GENERAL BOX COMPANY

General Offices:  
502 North Dearborn St. Chicago, Illinois

District Offices and Plants: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Sheboygan, Winchendon. Continental Box Company, Inc.: Houston, Dallas.

tions of the film. Control by foot switch permits the lamps to be "on" only when actually in use—a factor which eases eyestrain and prolongs lamp life.

### Oil Remover

"Flix, the Hygienic Oil Remover," is a new hand-sized, semiquilted cloth pad containing an undisclosed absorbent substance. It is manufactured by the Waverly Petroleum Products Co., 478 Drexel Bldg., Philadelphia 6, for the purpose of quickly removing "all types of oils from the skin, leaving it clean and dry." A secondary use is indicated in the wiping of machines and machine parts preliminary to painting.

### Protective Shoe Coating

For the past three years, the Resistoflex Corp., Belleville, N. J., has been adding new items to its line of industrial garments—gloves, aprons, smocks, hoods, sleeve guards—for protecting workers against allergy, dermatitis, and folliculitis caused by oils and solvents. Newest item is Compar Shoe Coating.

It comes as a solution of a vinyl resin which is said to be "impervious to sul-



phur-base cutting oils, kerosene, paint, lacquer, cleaning and degreasing compounds, and other organic solvents . . . including trichlorethylene." Shoes are simply dipped in the solution and allowed to dry. It is claimed that "not only will the wearer be protected; the compar coating, resisting the destructive action of the solvent, yet leaving the leather entirely flexible, will protect and greatly extend the life of the shoe."

### Ring-Stapling Plier

Newest Bostitch Stapling Plier holds 60 to 70 open staples of the hog-ring type in its magazine at a loading and clinches them one at a time around a

pair of wires as fast as the plier handle can be squeezed. Rings are made of No. 16 wire and clinch to a diameter of  $\frac{1}{4}$  in. with a  $\frac{1}{4}$ -in. overlap. Narrow jaws facilitate work in constricted places.

Bostitch, Inc., 152 Division St., East Greenwich, R. I., developed the plier in cooperation with the armed forces for attaching strips of wire netting, fence



wires, etc., to one another. The tool is now available "in limited numbers to civilian industries engaged in important production."

### Calendar Stamp Pad

Newest product of the Louis Melind Co., 362 W. Chicago Ave., Chicago, is the Calendar Rubber Stamp Pad for desk use. It can be had in either black or red ink and has, as its name implies, a 1944 calendar on its metal cover to facilitate setting date stamps correctly.

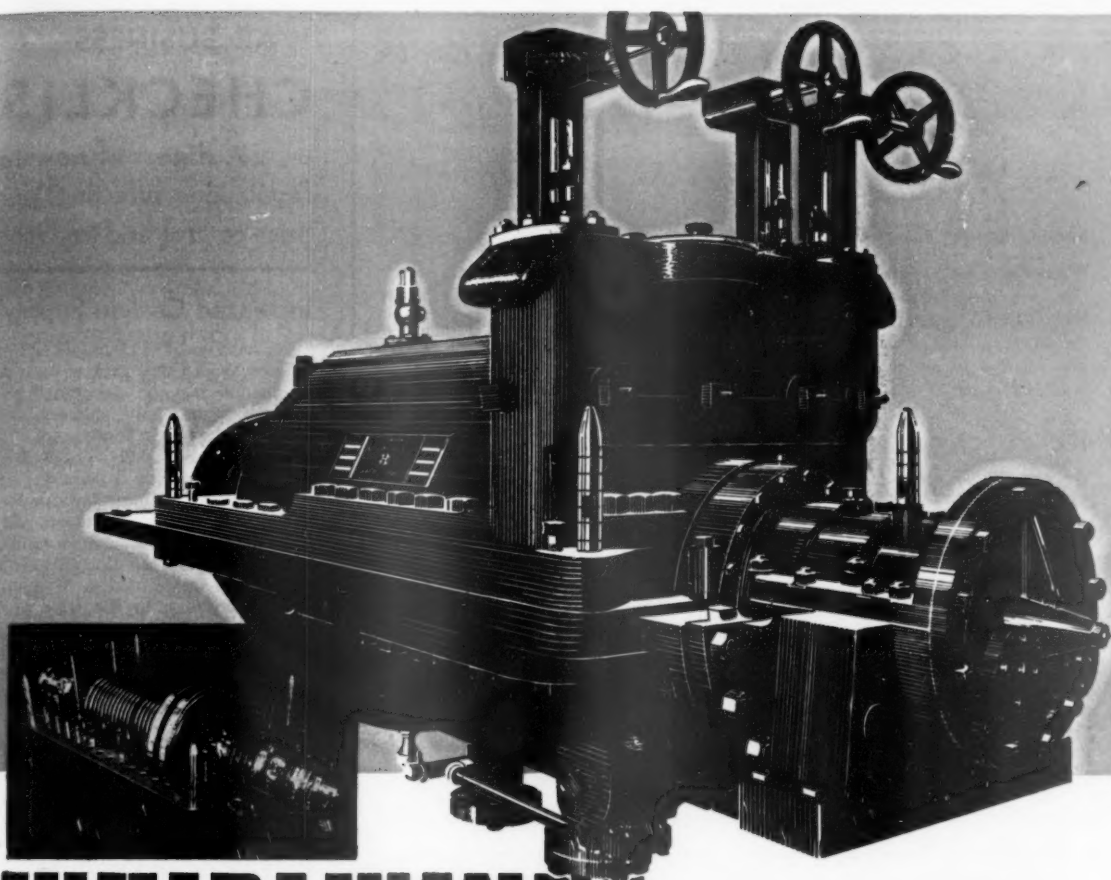
### New Products Briefs

Also reported this week, not only for their interest to certain designated business fields, but also for their possible import in the postwar planning of more or less allied fields and business in general, are the following:

• **Agriculture**—A new Ammonia-Gas Treatment for cottonseed, developed by the U. S. Dept. of Agriculture's Southern Regional Research Laboratory, New Orleans, promises to reduce oil loss in storage caused by the formation of excessive and undesirable free fatty acids in seed that has become dampened by rain during harvesting.

• **Aviation**—Fenwal, Inc., 110 Pleasant St., Ashland, Mass., is bringing out the new Continuous Type Fenwal Fire Detector. It consists of a slender fusible-alloy tube containing inorganic insulating beads which support a conductor wire in the center. If the temperature anywhere along the line where it is installed in a plane rises above 350F, the metal in the tube at that point melts, runs between the beads, and completes an electric circuit to actuate a signal light or other alarm. It is claimed that a "false alarm" will not occur from an ordinary backfire."





# WHIRLWINDS OF POWER

The driving force for hundreds of America's merchant ships today are mighty whirlwinds of steam power locked in steel cases—technically known as turbines. The trick in making such units lies in the manufacturer's ability to build meticulously into them perfect operation, smoothness, quiet and absolute balance—for the internal mechanism whirls at 6000 revolutions per minute!

Told that "they couldn't be built" on a large-scale production-line basis, Hendy, nevertheless,

did it, and thus wrote a new chapter in the history of turbine building, telescoping a decade of progress into just twenty months.

For the Maritime Commission, Hendy now builds main propulsion equipment, turbo-generator sets, and marine turbines up to 8500 hp complete with reduction gear sets. Other Hendy products include Crocker-Wheeler motors and generators, and Pomona and Westco pumps for industry and agriculture.

**JOSHUA HENDY DIVISION**

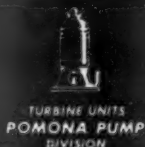
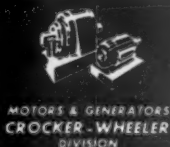
**JOSHUA HENDY IRON WORKS**

ESTABLISHED 1856

SUNNYVALE, CALIFORNIA

Branch Offices: BOSTON • BUFFALO • CHICAGO • CINCINNATI • CLEVELAND • DETROIT • NEW YORK • PHILADELPHIA • PITTSBURGH • SAN FRANCISCO • ST. LOUIS • WASHINGTON • LOS ANGELES

*Hendy  
Products*





## IN A CLASS BY OURSELVES!

*Doing just one thing  
...and doing it well*

### Has Made Our Company Nationally Necessary!

*We are specialists in our line . . . the only institution of its kind in the United States . . . with a clientele that for the most part has relied on our services continuously over the years.*

#### *We are* **INSURANCE TECHNICIANS**

We do not sell any kind of insurance . . . we have no connection with any insurance company. We serve only our clients, who pay us fair service fees for what we do. Our clients are satisfied with the service we render.

Every industry and every business carries insurance against a wide variety of risks . . . and since World War II began, the coverage necessary for the proper protection of business and industry has been a more complex and

even more important problem than ever before.

Now . . . and for as far ahead as anyone can see . . . the **QUALITY** of such insurance is of as much or more consequence than the **QUANTITY**. This applies to all forms of property, casualty, fidelity and general business coverage. Many types of insurance are available, and we know how to discriminate wisely in their selection for your business. We know precisely what risks should be insured and which need not be. Our's is expert and impartial advice.

Since 1901 we have aided hundreds of clients with a service that makes their insurance portfolios correct, keeps them that way, and holds the expense to the lowest safe figure. Our fee pays for itself by putting your insurance on a scientific and economical basis.

We invite your inquiry as to a plan to fit your business.

#### **INSURANCE AUDIT AND INSPECTION COMPANY**

INCORPORATED IN 1901

HUME-MANSUR BUILDING • ALVIN T. COATE, President and Founder • INDIANAPOLIS 4, INDIANA

## Half of Tomorrow's Job— Done Today

Wise management looks beyond the immediate horizon to plan for problems of peace. New products and processes, broader markets, and the replacement of old equipment—plus industry's resolution to assure post-war employment for its workers—indicate for many industrial companies the early need of new financing to obtain additional capital.

*The best time to finance is when earnings and prospects are good, while market conditions are favorable, and well before necessity forces the issue—in short when you can.*

### **F. EBERSTADT & CO.**

INVESTMENT BANKING

39 BROADWAY

NEW YORK 6, N. Y.

## WAR BUSINESS

# CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation.

### Increased Civilian Supply

An additional 54,000,000 lb. of raisins held by West Coast packers from their 1943 production may be distributed to civilians through regular trade channels, War Food Administration has announced. . . . About 4,000 cases or 120,000 lb. of dry pea and soy soup powder will soon be released to civilians by WFA from government reserves. . . . Though no dried apricots will be available for general civilian consumption from the 1943 pack, the smallest on record, a supply will be granted to hospital patients upon application to the regional offices of WFA. . . . Minor restrictions on the use of rivets and bolsters for professional food processing and kitchen cutlery, as well as for household kitchen and table cutlery, are removed by WPB Order L-140-a, as amended, which thus makes possible a better type of cutlery, though not a larger quantity; restrictions on the use of cutlery for premiums and on sales of boxed sets are also removed.

### Relaxation of Priorities

As a result of the improved supply situation for **saponified (undistilled) red oil**, this oil has been removed from specific allocation control by an amendment to Food Distribution Order 53, which requires producers each month to set aside only one-third of their previous month's output. . . . By amending Supplementary Conservation Order M-9-c-4, WPB has freed frozen inventories of copper and copper-base alloy **pipe, tubings, and fittings**, in the hands of gas or water utilities, for use in gas and water supply systems and distribution installations, when the freed items are to be used both underground and outside of a building. . . . To meet the Army demand for **sweet potatoes**, Amendment 1 to Temporary Maximum Price Regulation 34 removes from price control sweet potatoes sold to dehydrators, whose entire output goes to the Army.

### Women's, Children's Apparel

The OPA restriction forbidding manufacturers of women's and children's outer garments to add new lines of apparel at higher prices than those they carried in a specified 1942 base period has been relaxed. After Feb. 1, these manufacturers may add lines at slightly higher prices than those items they have been producing. By permitting somewhat better quality items, the output of inexpensive apparel will be encouraged. This does not mean that ceiling prices of any garments now made are to be raised, since the higher prices must reflect higher quality and increased costs. Ceiling limits



on the new lines are specified in the amendment. (Amendment 2, Revised Regulation 287.)

## Aluminum

Small amounts of aluminum will be released for postwar experiments, upon application, under a new WPB policy, provided that the experiments will not divert manpower, technical skills, or facilities from the war program. All grants will be made under Aluminum Conservation Order M-1-i.

## Steel Projects Canceled

WPB's Steel Division has recommended to Defense Plant Corp. that work be stopped on seven more steel plant expansion projects, estimated to cost nearly \$97,000,000 and designed to increase the supply of alloy and high-quality carbon steel (page 15). Reason given for termination is that steel originally scheduled for production by the projects is not now needed in the war program. Six of the projects—some near completion, some not yet started—belong to Republic Steel Corp. in South Chicago, (2); Canton, Ohio, (2); Massillon, Ohio; and East Hartford, Conn. One is the Andrew Steel Co. plant at Wilder, Ky. After cancellation, the plants will remain in the hands of the operating companies, which may complete the projects with their own funds if they wish.

## Vitamin A

Under War Food Administration's 1944 allocation of vitamin A, U. S. civilians are scheduled to get 88 trillion USP units, or a little more than 63% of the total allocation, which is about what they got last year; 4% goes to the men in the armed forces, who get most of their vitamins through balanced diet; the remaining 33% is for export and to establish an emergency reserve.

By establishing a revised schedule of maximum prices for vitamin A natural oils and concentrates, OPA has moved to check "blending" operations in vitamin oils, which resulted in a product of such low vitamin potency as to be outside the controls of the former schedule. (Amendment 1, Regulation 203.)

## Pressure Cookers

Production of 400,000 pressure cookers for home canning use, to be completed by July 1, has been assigned by WPB to six firms with the provision that manufacture of the cookers must not interfere with war work. Canners will be made in 7-quart and 14-quart sizes. Increased supplies of aluminum permit use of that material instead of the carbon steel used last year.

## Petroleum Products

The Office of Defense Transportation is setting up a program to speed the movement of petroleum products to the East Coast. Besides asking the cooperation of oil companies in prompt loading and unloading of tank cars and tank trucks, ODT has requested the Automotive Division of WPB



# 300 FEET of necessity!

Soldiers eat . . . they get medical attention *in time* . . . they get ammunition and supplies *on time* . . . often because of a length of rope *you couldn't buy!*

Rope, on jeeps, tanks, trucks, ambulances and other Service vehicles, is one of the big reasons why rope users here at home must **SAVE** the rope they now have. It won't be plentiful again until after the war.

Whether you use rope, or not, you can serve your Government by helping to spread the story of **ROPE CONSERVATION**. Write to us for the W. P. B. sponsored booklet, "The Rope You Save Fights For You!" Plymouth Cordage Company, North Plymouth, Massachusetts and Welland, Ontario.

# PLYMOUTH

THE ROPE YOU CAN TRUST

BINDER TWINE

• TYING TWINE





**STAND BY NILES DRIVE**

**When discovered,  
the fire was beyond  
control. The cause**

**GIVE FIRE A FIVE MINUTE START** in an unprotected plant or warehouse and you can count on a crippled or destroyed business. All the insurance in the world will not save the building nor buy back lost customers. Neither will "fireproof" construction prevent burning contents from reducing a structure to twisted steel and broken cement.

**FIRE HAZARDS HAVE MULTIPLIED** during these war years. Increased number of workers, many of them careless; round-the-clock production with no time for "house-keeping"; new materials, many of them inflammable;

overworked motors... all these have increased your chances of a disastrous fire.

**FIRE CAN BE CONTROLLED.** Fortunately there is one proved way of checking this needless destruction *at the source, when it starts*... a Grinnell Automatic Sprinkler System. During the past ten years over 8000 fires in Grinnell-protected buildings have put themselves out before major damage could occur.

*Don't let this commonest of all hazards ruin your business. See that your buildings have this 24-hour-a-day protection. Experienced engineers at nearby Grinnell offices will help you plan protection for your buildings. Call them.*  
Grinnell Company, Inc., Executive Offices, Providence 1, R. I.  
Branch Offices in principal cities.

#### QUESTIONS AND ANSWERS

##### about Automatic Sprinkler Fire Protection



**Q.** Will my plant have to shut down while you're installing sprinklers?

**A.** No. A Grinnell System is prefabricated in our plant, installed in your plant by men so expert they've equipped hospitals without disturbing patients.



**Q.** How much will a Grinnell System cost me?

**A.** In a typical case the insurance premiums were \$5000 a year. With Grinnell Sprinkler Protection the premium reductions paid for the system in 8 1/3 years. Then it paid the owner \$3000 a year.



**GRINNELL**  
**AUTOMATIC SPRINKLERS**

**For Production Protection**



to secure prompt release of new commercial vehicles. In addition, the Assn. of American Railroads has again issued last year's order that oil traffic be given priority handling next to troop movements.

### Gasoline

Beginning Feb. 1, local rationing boards will be allotted small monthly quotas of gasoline by OPA to take care of hardship cases in situations not provided for by gasoline rationing regulations. The boards will have full authority in granting "personal necessity" rations, as long as they stay within their over-all quotas. (Amendment 96, Ration Order 5-C.)

### Horse Collars

Because farm horses can't get collars, the food program is threatened. Therefore, manufacturers are forbidden by WPB to cut, use, or incorporate leather in any product until they have filled orders for horse collars for the three-month period beginning Feb. 1, at least in quantities equal to the number they produced in the first three months of 1942. In cases where price relief will be necessary to carry out the program, adjustments will be made under a provision to be issued shortly. (Order M-310.)

### Cheese

More milk is directed into cheddar cheese, butter, dried skim milk, evaporated milk, and other important dairy products, by a War Food Administration order restricting the total 1944 production of all types other than cheddar, cottage, pot, and bakers' cheese, to the quantity produced in 1942. Cheddar—easiest to ship and keep—constitutes more than 95% of all war purchases of cheese. However, in 1943, a 17,000,000-lb. increase in the output of brick, limburger, cream, Roquefort, and Italian types, as compared with 1942, took about 165,000,000 lb. of milk from more important cheeses. It is to recapture this milk for more vital uses that the present order has been issued. (Food Distribution Order 92.)

### Canner and Cutter Beef

Packers operating under federal inspection are required to set aside at least 80% of all canner and cutter beef for the U. S. armed forces. (Amendment 6, Food Distribution Order 75.2.)

### Print Paper

Some latitude is allowed in the use of print paper quotas for shopping guides, free-distribution newspapers, or want-ad periodicals. Under Schedule II of WPB Order L-241, a person is limited to 75% of the weight of paper he used for such publications in 1941. According to a recent interpretation, if, in 1941, he issued shopping guides, for example, he may use his quotas to put out want-ad periodicals this year if he wishes. (Interpretation I, Order L-241.)

Publishers of daily newspapers are granted supplementary paper quotas to take care of Leap Year Day requirements. The method



This new up-acting Birdsboro Plastic Press, with *self-contained pump unit*, is designed for the pressing of *large* plastic parts . . . and is equipped with high and low pressure pump units for fast closing and economical pressing. Available in sizes such as 600, 900, 1200 tons and larger, this press incorporates all the latest improvement features found in other Birdsboro Plastic Presses.

Once again Birdsboro engineers turn their skill to building a press to meet a specific plastic industry need. Birdsboro specialists will be glad to discuss and help solve your individual press problems. Give them a call NOW!

Birdsboro Steel Foundry & Machine Co • Birdsboro, Pa.

**BIRDSBORO**  
HYDRAULIC PLASTIC PRESSES



Will you need  
our kind of  
Conversion  
Help?

"When the  
Shooting Stops"

In conversion, establishment of new practices, or organizing production of new items, the ingenuity of our engineers well may prove helpful.

It has been masterfully applied to such difficult problems as wholly original designing of automatic bomb-release racks and shackles and similar precision war-products. Generous recognition has come from officials and technical editors.

This creative engineering will be available soon for experimental, as well as work on special machines, tools and dies.

Our productive capacity, still devoted to war work, will be available for mass production of parts and complete assemblies "When the Shooting Stops."

This ingenuity and the skill, competence and loyalty of our productive department, are war-enlarged assets of great potential value to industry.

*"I shall gladly send our booklet with this title to any industrial executive who will address me personally.  
Joseph J. Cheney, President.*

WE OFFER  
INGENUITY  
After Victory

**Spriesch** EST. 1923  
TOOL & MANUFACTURING CO., Inc.

19 HOWARD ST. Ad No. 26 BUFFALO & N. Y.

of computing the extra day's allotment is established under Direction 2, WPB Order L-240.

## Kapok

To conserve Java-grade kapok, which can no longer be imported, its use has been restricted by WPB to the manufacture of life-saving equipment for the U. S. Army, Navy, Maritime Commission, and the War Shipping Administration. (Order M-85, as amended.)

## Brewers' Hops

To assure better distribution of the available hop supply, a brewer is limited to the quantity of hops he used in the manufacture of malt beverages in 1943; similar restrictions are in effect for hop products. Reports on their use during 1943 must be filed with the War Food Administration. To relieve transportation strain in peak beer-production

months, brewers are allowed to carry an inventory of malt equal to 20% of 1942 usage instead of 10%, as heretofore. (Food Distribution Order 66, as amended.)

## Wood Furniture

Play yards, play pens, juvenile porch and stair gates, infants' toilet seats, and bathtubs are subject to the 5% markup allowed on manufacturers' prices by OPA several weeks ago (BW-Jan. 17, 44, p. 70). (Amendment 2, Order 1052, Section 1499.159, Regulation 188.)

## Glues

In face of an estimated cut of 25%-35% in hide glue supplies, animal glues have been placed under WPB allocation for the first time. Consumer items affected include matches, soda pop bottles, rayon, furniture, and books among many others. Full production—on the 1943 basis—will be permitted



Aluminum Co. of America  
Trentwood, Wash.  
American Electrical Heater  
Co.  
Detroit, Mich.  
Arerods Corp.  
Cleveland, Ohio  
Arvey Corp.  
Jersey City, N. J.  
Atlas Elevator Co.  
San Francisco, Calif.  
Balch Mfg. Co.  
Kalamazoo, Mich.  
Butler Mfg. Co.  
Galesburg, Ill.  
Carlton Lamp Corp.  
Newark, N. J.  
Cochrane Corp.  
Philadelphia, Pa.  
Columbia Electric & Mfg. Co.  
Spokane, Wash.  
Columbian Rope Co.  
Auburn, N. Y.  
Columbus Foundry Corp.  
Brooklyn, N. Y.  
Continental Can Co.  
Chicago, Ill.  
L. A. Darling Co.  
Bronson, Mich.  
E. I. du Pont de Nemours  
& Co., Inc.  
Wyandotte, Mich.  
Ereco Radio Laboratories, Inc.  
Hempstead, N. Y.

Florence Stove Co.  
Kankakee, Ill.  
Food Machinery Corp.  
Riverside, Calif.  
The Freiberg Mahogany Co.  
New Orleans, La.  
Frisch & Co.  
New York, N. Y.  
Great Lakes Steel Corp.  
Mansfield, Ohio  
Griffin & Co., Jeffersonville  
Boat & Machinery Co.  
Jeffersonville, Ind.  
Houdaille-Hershey Corp.  
Decatur, Ill.  
International Pacific Pulp &  
Paper Co., Multnomah  
Lumber & Box Sales Co.  
Portland, Ore.  
Kane Mfg. Corp.  
Kane, Pa.  
Edward Katzinger Co.  
Chicago, Ill.  
James A. Kiley Co.  
Somerville, Mass.  
The Lima Woolen Mills Co.  
Lima, Ohio  
Manco Mfg. Co.  
Bradley, Ill.  
McDonough Steel Co.  
Oakland, Calif.  
Nachman Motor Corp.  
Long Island, N. Y.

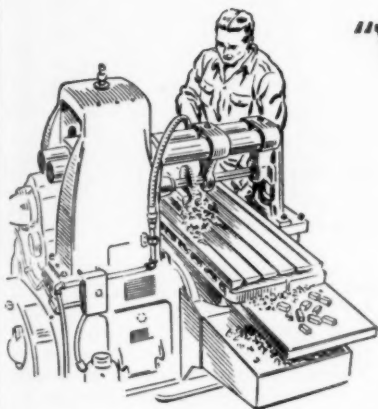
Nashua Mfg. Co.  
Lewiston, Me.  
National Fireworks, Inc.  
Chillicothe, Ohio  
Norfolk Iron Co.  
North Quincy, Mass.  
The Osborn Mfg. Co.  
Cleveland, Ohio  
Frank D. Palmer, Inc.  
Chicago, Ill.  
Pittsburgh Piping & Equip-  
ment Co.  
Pittsburgh, Pa.  
Roth Mfg. Co.  
Chicago, Ill.  
E. J. Schoettle Paper Box  
Co., Precision Mfg. Co.  
Philadelphia, Pa.  
Seagoing Uniform Corp.  
Brooklyn, N. Y.  
Shell Oil Co., Inc.  
Martinez, Calif.  
Southern Welding & Machine  
Co.  
Charlottesville, Va.  
Square D. Co.  
Milwaukee, Wis.  
Symington-Gould Corp.  
Depew, N. Y.  
E. C. Taylor Engineering Co.  
Tuckahoe, N. Y.  
Wollensak Optical Co.  
Rochester, N. Y.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)





## "WE'VE FOUND **JOYCE** A SOUND CHOICE"



**JOYCE ENGINEERS** and craftsmen have been privileged to play an important part in making possible Industry's production miracles, for many of the country's largest industrial organizations have turned to Joyce for assistance in meeting their war contracts. If you have a problem involving the de-

sign, manufacture or assembly of machines, metal products or precision parts in production quantities, why not investigate the facilities Joyce has available? From the designing of special machines to the fabrication of hair-line precision parts, Joyce offers the benefit of experience gained through an unusually wide range of assignments in many fields of industry. If it can be made better, faster, more economically, Joyce "know how" will find the way. Joyce's production performance on jobs for the Army, Navy, Maritime and Aircraft services—as well as scores of leading war plants—is your assurance that

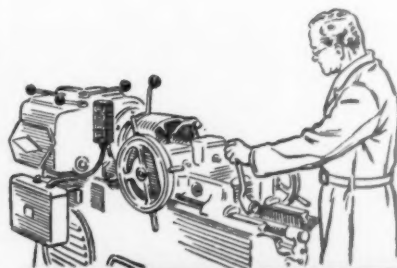
you, too, will find Joyce a sound choice.

A Joyce representative will be glad to explain in detail the full scope of the service Joyce is equipped to render.

★

*Bring 'em back alive—with War Bonds*

★



# JOYCE

*Machine Company*

WHEATSHEAF LANE • FRANKFORD • PHILADELPHIA

MANUFACTURERS OF PRECISION PARTS  
FOR ALL KEY INDUSTRIES

BEHIND THE MAN ▶ BEHIND THE MAN ▶ BEHIND THE GUN





*It takes more than power off the tee to be consistently "dead to the pin" on tricky par three holes.*

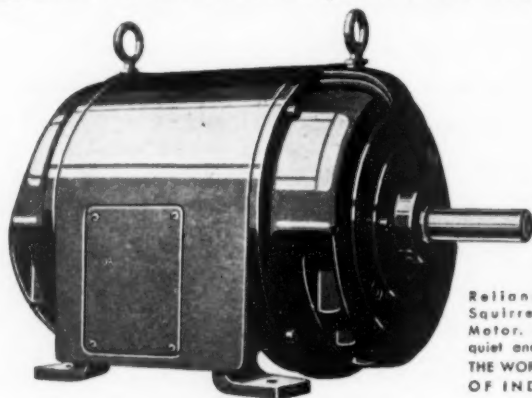
## MORE THAN POWER



Power is important, both on a golf course and in a factory. But power alone can't begin to produce the results that are possible when that power is applied, directed and controlled in the best possible way.

We at Reliance proved long ago that electric motor-drive can be a lot more than a source of power. Among other things, motor-drive, applied with the "know how" that comes with experience, means the elimination of clutches, simplified operations, lower maintenance costs and improvement in the finished product.

Before you complete plans for new machine designs or improved production processes, we suggest that you invite a Reliance man to talk things over with your own engineering and production groups. His suggestions for best results are yours for the asking.



Reliance A.C. Squirrel-cage Motor. Simple, quiet and rugged. THE WORK-HORSE OF INDUSTRY.

# RELIANCE<sup>A.C.</sup><sub>D.C.</sub> MOTORS

**RELIANCE ELECTRIC & ENGINEERING CO.**

1069 Ivanhoe Road • Cleveland, Ohio

Birmingham • Boston • Buffalo • Chicago • Cincinnati • Detroit • Greenville (S. C.) • Houston  
Los Angeles • Minneapolis • New York • Philadelphia • Pittsburgh • Portland (Ore.) • St. Louis  
Salt Lake City • San Francisco • Syracuse • Washington, D. C. • and other principal cities.

only in abrasives and gaskets. (Order M-367.)

To supplement dwindling domestic raw materials, which are down to about 60% of materials available in 1941, producers' and jobbers' ceilings for hide glue containing imported raw materials have been revised upward by OPA. (Amendment 5, Revised Price Schedule 76.)

WPB ruling forbids the use of certain types of gluestock in production of edible or inedible gelatin and the use of other types of raw stock in fertilizer and products for farm use. This action is expected to divert 12,000 tons of hide stock to glue production. (Part 3293, Order M-368.)

### Wood-Boring Bits

To meet essential civilian requirements and heavy war demands, WPB has announced a simplification schedule for wood-boring bits, which cuts the kinds and sizes permitted from 1,285 to 422—a reduction of approximately 67%. Increased production of permitted types is looked for as a result of this action. (Schedule VIII, Order L-157.)

### Coke

Domestic consumers of coke are, with some important exceptions, limited to amounts that will bring their inventory of solid fuels to a month's supply, by a new regulation coordinating retail coke controls with similar controls already in effect for bituminous and anthracite coal. (Solid Fuels Administration for War Regulation 12.)

All byproduct and retort gas coke produced in the East has been given a 50¢-per-ton boost in ceiling prices, to compensate for additional costs. This is the first increase allowed in eastern territory since price control began in 1941. (Amendment 2, OPA Regulation 29.)

### Other Price Actions

New and reduced maximum prices for cured and smoked **pork tongues** are set at retail by Amendment 13, OPA Regulation 355, at levels in line with revised wholesale prices for these items. . . . Railroads and other industrial consumers will pay considerably less for **fence posts** under an OPA action that reduces concentrators' markups to 15% from previous markups ranging between 25% and 33½%; retail lumber yards may continue to charge the old prices, however (Amendment 2, Revised Regulation 324). . . . **Sesame oil**, used in making food and some types of drugs and pharmaceuticals, is placed under rationing by OPA Amendment 101 to Ration Order 16, at a value of 5 points per lb., the same as the current point value of salad and cooking oils. . . . To overcome a serious shortage in **padlocks**, manufacturers who are unable to maintain production under existing price ceilings may apply for adjustments to cover actual costs, as a result of OPA Amendment 3, Revised Price Schedule 40. . . . Amendment 3, OPA Regulation 428, allows an 8½¢-per-gal. increase in maximum prices that processors and secondary packers of **cider vinegar** of specified grade may charge on tank-car or tank-truck lots, to compensate for increased cost of apples.



M-367,  
the raw  
60% of  
ers' and  
ning im  
ised up  
Revised

certain  
edible o  
types of  
for farm  
12,000  
(Part

ements  
has an  
r wood  
nd sizes  
ction of  
duction  
a result  
L-157.)

e, with  
ted to  
tory of  
a new  
controls  
ect for  
d Fuels  
2.)  
ke pro  
0e-per  
pense  
increase  
ce con  
OPA

ces for  
set at  
ulation  
olesale  
ds and  
consid-  
OPA  
arkups  
ng be-  
yards  
ow-  
ulation  
g food  
accuti-  
OPA  
s, at a  
as the  
ooking  
ortage  
unable  
price  
cover  
ment  
mend-  
as an  
prices  
ers of  
charge  
ensate

1944



## This may soon be a white collar job

When in the not too distant future, radio frequency heating comes more generally into service, the black gang may become skilled white collar workers. For the control of heat through this method is accomplished by the turn of a few knobs and dials.

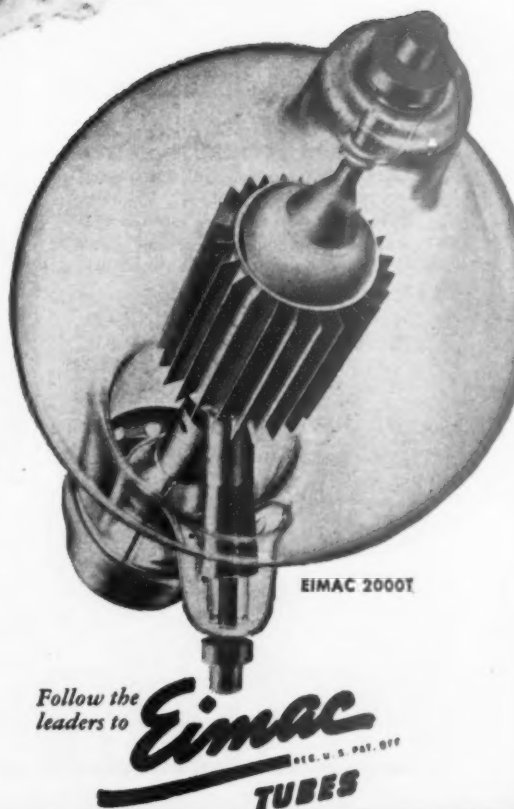
The application of radio frequencies, either by electrostatic\* or electromagnetic methods, acts to produce friction between the molecules of the material. The friction is produced by speeding up the movement of the molecules themselves, causing them to rub more vigorously together. Thus radio frequency heating is quite different from conventional methods in that it develops heat within the material itself rather than having it applied from a separate source. The advantages of this method of heating materials are many: Heat can be localized and controlled; heat is rapidly

generated and can be instantly suspended to prevent damage from overheating, to mention but a few.

Like radio transmission and all other things in the field of electronics, radio frequency heating owes its existence to the electron vacuum tube. In this field the name "EIMAC" looms big as the source of great advancements in the art. The dependability and outstanding superiority of Eimac tubes is attested to by their acceptance and continued use by the leading electronic engineers throughout the world. In considering radio frequency heating equipment for your application, look first for the name Eimac on your vacuum tubes.



\*"Electrostatic" describes the application of RF heat to non-metallic substances and "electromagnetic" to metals.



**EITEL-McCULLOUGH, INC. • SAN BRUNO, CALIFORNIA**

Plants located at Salt Lake City, Utah and San Bruno, California

Export Agents: **FRAZAR & HANSEN, 301 Clay Street, San Francisco, California, U.S. A.**

Follow the  
leaders to

**Eimac**  
REG. U. S. PAT. OFF.  
**TUBES**



Make Accurate, Speedy Photo-Copies  
in Every Department of Your Business



Executives see countless uses for A-PE-CO in every department. They welcome "photo-exact" accuracy and speed. Important papers are copied in complete privacy. No proofreading. Many say A-PE-CO saves thousands of man-hours by doing a day's stenotyping in a jiffy; by copying direct from blueprints without tracings; reproducing financial records and cost sheets. You, too, should have the modern, versatile A-PE-CO Photo-Copier. Its accuracy is necessary in your war work and post-war plans. Get this new business habit!

**Legally Accepted Photo-Copies**

- Letters • Pictures • Documents • Drawings
- Records • Receipts • Blueprints • Shop orders

A-PE-CO copies direct from anything written, printed (one or both sides), drawn, or photographed. Permanent, easy-to-read, same-size copies made easily and quickly. Mistakes are impossible. Any girl or boy quickly becomes expert. See how thousands are using this modern, versatile method. Immediate delivery. Copy right with A-PE-CO. Write for A-PE-CO folder.

**AMERICAN PHOTOCOPY EQUIPMENT CO.**

2849 N. Clark St. Dept. B-24, Chicago 14, Illinois  
In Canada, Railway & Power Engineering Corp., Ltd.  
Representatives in principal cities

**SPEEDIER DELIVERY  
...when shipments are**

**MARSH STENCIL  
MARKED**

Cut your own shipping stencils on the MARSH STENCIL MACHINE. Three sizes to meet Government specifications...1", 3/4", 1/2". Requires no experience; saves up to \$50 monthly in shipping room time. Also Inks, Brushes, Stencil Board. Write for prices and booklet.

**MARSH STENCIL MACHINE CO.**  
58, Marsh Bldg., Belleville, Ill., U. S. A.



# MARKETING

## Army Sales Aired

House committee is told that government agencies ignore ceilings and feed black market with surplus used materials.

Charges that the government itself—through the Procurement Division of the Treasury Dept. and other agencies—has been guilty of feeding the black market have illuminated recent congressional hearings on disposal of government surpluses.

Witnesses before the House Banking & Currency Committee have cited examples (none too well documented) in which plumbing supplies, used trucks, and other scarce goods have been sold into the black markets. Hopping mad at these charges, Treasury procurement officials are readying a hot rebuttal; but OPA officials say they have had trouble with government surpluses trickling into the black market at over-the-ceiling prices.

• **Batteries Probed**—In Utah, the Army's Ninth Service Command and the regional OPA office are investigating the re-

ported sale for \$25,000 of 80,000 Army-released batteries, said to have been picked up as salvage for \$130. In spite of such examples, OPA doubts that the over-all situation is as bad as it has been painted in Congress.

Principal trouble has been in textiles—a difficult industry to police and always one of OPA's major problems. Here is the sort of thing that has happened. Treasury Procurement offered 10,000 Army blankets for sale. The highest bid comes not from an established converter, wholesaler, or retailer but from a company which styles itself as "Army Blanket Disposal Corp." and which is in the blanket business as of yesterday.

• **No Ceiling Handicap**—Not being a regular member of the trade, this company has no ceiling price under the OPA regulation covering blankets. It opens a couple of retail stores, sells off the blankets (along with any other surpluses it may have picked up) at \$18 apiece, closes down a couple of weeks later before OPA's enforcement staff can catch up with it.

To make sure that surpluses stay within ceiling prices at least as long as the government has control over them, OPA and Treasury Procurement are



## FM PLANNERS

Looking into the future of frequency modulation are three of its top boosters (left to right): Maj. Edwin H. Armstrong, inventor of FM; Chairman James L. Fly of the Federal Communications Commission; and Dr.

W. R. G. Baker, vice-president of General Electric and chairman of the Radio Technical Planning Board. To FM Broadcasters, Inc., at its New York meeting last week, the postwar expansion of that staticless high-fidelity radio system (BW—Nov. 13'43,p90) seemed a sure-fire thing.



now trying to work out a pricing formula which can be generally applied. Such a formula already has been announced for sales by government agencies of surplus food. Under this, the resale price of the purchaser (if he is a manufacturer, producer, or processor), or (in the case of a distributor) the maximum price that he could pay to his supplier for the same, or a similar, commodity sets the ceiling.

• **Government Sales Exempted**—Sales of surplus scrap metal by the military services and Treasury Procurement have been exempted from price control, but purchasers are required to certify that they will observe ceilings in reselling.

To keep scarce goods out of the hands of speculators, Treasury Procurement is veering to a policy of handling bids on a negotiated or seminegotiated basis. Thus, when there was \$1,000,000 of used harness for sale recently, officials did not put it on the auction block, but went to WPB for a list of established harness makers, finally sold the lot to the original manufacturer for a price which enabled him to sell at ceiling prices.

• **How Trucks Are Sold**—In disposing of used Army trucks, Treasury Procurement and the Office of Defense Transportation had been following a system whereby ODT was notified in advance, was then able to tip off the buyers it considered most deserving, giving them an edge over other bidders (BW—Jan. 15'44,p7). This is now being tightened up to require actual ODT certification before a prospective buyer can be eligible to bid. Ceiling prices for the trucks are set by OPA after inspection.

In refusing to accept bids at above-ceiling prices, Procurement is plagued by receipt of uniform bids which hit the ceiling right on the button.

## TIMES BUYS WQXR

New York City's radio station WQXR, famous for its program policy of devoting 80% of broadcast time to classical music (BW—Mar.16'38,p38), was sold this week to the New York Times for a reputed \$1,000,000.

Presumably the Times has had an eye on WQXR for some time, and it wasted no time once the Federal Communications Commission gave joint ownership of newspapers and radio stations the go signal (BW—Jan.22'44,p88). All of the stock of the Interstate Broadcasting Co. which operates WQXR was acquired, giving the Times title also to the frequency modulation station WQXQ.

The transaction enabled Time, Inc., to unload its interest in WQXR, frowned on by the FCC since Time's acquisition last month of \$1,000,000 worth of stock in the Blue Network (BW—Jan.8'44,p88).

## FOR THAT *New* PRODUCT



## compact design...low weight with a **BLACK & DECKER MOTOR**

Your new product can be given these important advantages by using a Black & Decker motor because:

1. Every motor is designed to meet the requirements of a particular application.
2. Long experience has taught us where and how much motor weight can be reduced without interfering with essential electrical characteristics.

**THOROUGH  
ENGINEERING**  
is the basic factor behind  
the successful operation  
of the above de-icer pump  
motor and many other  
special application motors  
we have designed for  
all types of equipment.

3. As a result of this experience, frequently product design suggestions can be made which reduce product weight... improve compactness... better performance.

In order to realize the full benefits of special application, be sure to consider the motor in the early stages of product development.

**THE BLACK & DECKER ELECTRIC CO.**  
KENT, OHIO



# Black & Decker

FRACTIONAL HORSEPOWER  
SPECIAL APPLICATION **MOTORS**





## EXPEDITE YOUR BUSINESS WITH

**TELE**  
WEBSTER ELECTRIC  
**Teletalk**  
REG. U.S. PAT. OFFICE

Graybar Specialists in 86 key cities are ready to show you how you can close-knit your business with Teletalk... How, like Doubleday, Doran and Company, whose experience is shown on the opposite page, you can keep your key executives in closer contact with Teletalk Amplified Intercommunication Systems.

Teletalk is so designed that it may be adapted to the requirements of both the large and small business. The carefully planned service of the Graybar houses located in every key city enables you to get prompt appraisal of your requirements, expert recommendations for your need and experienced supervision of its installation.

Let the Graybar Specialist near you show you how Teletalk Amplified Intercommunication Systems can pay for themselves in a short time by short-cutting the time wasted in contact with your key department heads.

For complete information, phone your nearest Graybar house. You will find it listed in your classified telephone directory.

Graybar Electric Company, Inc.  
Graybar Building, New York City

Offices in Over 80  
Principal Cities



## Magazine Zenith

Advertising revenue for 1943 tops all records, despite big volume forced out because of the paper shortage.

Last year was by all odds the biggest that national magazines have ever known, with advertising sales in 90-odd magazines listed by Publishers' Information Bureau totaling \$232,071,971, the highest take in the history of magazine publishing. The unprecedented sales topped 1942's total by more than \$54,000,000, and the record year 1929 by nearly \$30,000,000. The 31% gain over the previous year was the largest increase in a single year since the last war.

• **Hard to Measure**—But the actual extent of demand for magazine advertising last year will never be known. It could be measured only in the millions of dollars worth of business which the paper shortage forced publishers to reject. Media men guess that magazines turned down well over \$100,000,000 worth of advertising last year.

Some of this unquestionably found its way into second and third choice publications—just as programs refused by radio networks (BW—Jan. 15'44, p. 97) went to smaller stations, and copy which found no room in the metropolitan press (BW—Jan. 29'44, p. 104) was picked up by smaller papers.

• **Changing the Ratios**—Generally speaking, a magazine is more apt to thank its individual paper supply for

last year's gain than its increased popularity as an advertising medium. Officially a straight 10% paper cut applied to all magazines alike. But those which ran short of advertising in the lean year and had to fill their columns with a heavy proportion of editorial matter were in a position to shift the balance in favor of paid insertions when last year's bonanza hit.

Many habitually prosperous magazines, on the other hand, were already running on the minimum editorial content, and had to make room for additional advertising by more complicated measures. Almost universally, publishers reduced the weight of their paper stock, cut margins and trim size. Through countless such economies in paper, they made room for a limited quantity of new advertising which they cautiously allotted.

• **Generals Gain Most**—Notwithstanding the new factors in the equation, media men last week were discussing P.I.B. figures with interest as the best available yardstick of 1943's gross advertising sales and competitive positions.

General magazines as a group rolled up the biggest percentage gains, showing a 54% increase for the year and total sales of \$17,641,990 compared with \$11,448,704 in 1942.

Cosmopolitan was first in this classification with a \$4,263,410 total, 51% ahead of 1942, when it also led the group. Close on Cosmopolitan's heels was the American magazine, which also topped \$4,000,000.

• **Life Sets Pace**—Weekly magazines—the only group which had survived 1942 without slipping from the 1941 revenue level—showed a 30% gain in

## Advertising in National Periodicals

Magazines <sup>1</sup>	1943	1942	% Increase in Revenue
Women's .....	\$58,566,344	\$46,108,551	27%
General .....	17,641,990	11,448,704	54%
Special .....	17,463,927	13,539,470	29%
Weekly .....	138,399,710	106,568,556	30%
Total .....	\$232,071,971	\$177,665,281	31%
<b>Farm Papers<sup>2</sup></b>			
11 publications .....	\$14,164,656	\$10,297,004	38%
<b>Industrial, Trade, and Class Papers<sup>2</sup></b>			
	Pages of Space		% Increase
	1943	1942	
Industrial .....	157,081	125,524	25%
Trade .....	25,378	20,670	18%
Export .....	7,554	5,856	29%
Class .....	12,412	10,232	21%
Total .....	202,425	162,282	25%

<sup>1</sup> Space and dollar volume figures, supplied by Publishers' Information Bureau, are based on card rates for single insertions.

<sup>2</sup> Figures supplied by Industrial Marketing from data furnished by 159 business papers.



# WEBSTER TELETALK CHART... DOUBLEDAY-DORAN & CO., INC.



**ROBERT L. CONLIN**  
Comptroller of Doubleday, Doran & Company, Inc., shown talking into the Webster Electric Teletalk 24 station master unit which keeps him in close touch with all the major department heads of this large publishing organization. Chart shows the departments which are connected by Teletalk.

## "BRINGS HEADS OF ALL DEPARTMENTS AS CLOSE AS IF PERSONALLY PRESENT"

*Says Comptroller of Doubleday, Doran & Company, Inc., of Teletalk Installation*

"Our Teletalk System has accomplished exactly what we wanted," says R. L. Conlin, Comptroller of the gigantic publishing house of Doubleday, Doran & Company, Inc., of Garden City, New York. "It brings the heads of all of the operating office departments as close as if they were personally present, merely through pressing a switch and talking into the unit."

Executive offices of Doubleday, Doran are in several buildings scattered over a wide area. Before Teletalk installation, a personal visit frequently meant a walk of several blocks. Now a flip of a convenient key allows Mr. Conlin and his department heads to be in instant communication. The Doubleday, Doran Teletalk Amplified Inter-communication System has been in continuous operation eight hours a day during the business week for two years without any repair service required.

Teletalk is the most modern system of inter-office and inter-plant communication on the market today. It expedites every business function, saves time, footsteps and energy. It is available in just the size to meet the demands of the large or small organization... is easy to install, operating directly from the light circuit.

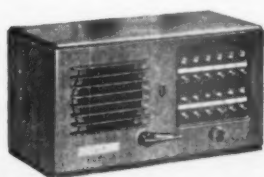
Teletalk distributors are located in every major city. You will find them listed in your classified telephone directory as shown below. If none is listed in your community, write us and we will see that you are properly contacted.

**WEBSTER ELECTRIC COMPANY, Racine, Wisconsin, U.S.A., Established 1909. Export Dept.: 13 E. 40th St., New York (16), N. Y. Cable Address: "ARLAB" New York City**

*Licensed under U. S. Patents of Western Electric Company, Incorporated, and American Telephone and Telegraph Company*



Illustrated at right, Model 212 AM. with Annunciators, for use with 12 stations or less.



**WEBSTER ELECTRIC**  
Electronic inter-communication, paging and sound distribution systems for offices, stores, factories, buildings, institutions, homes and farms.

**"WHERE TO BUY IT"**  
**GRAYBAR ELECTRIC CO., INC.**  
180 Varick Street NEW YORK WAtker 5-9000



LET'S ALL BACK THE ATTACK—BUY EXTRA BONDS

# WEBSTER ELECTRIC

"Where Quality is a Responsibility and Fair Dealing an Obligation"



PHYSICAL AND CHEMICAL  
PROPERTIES OF

# dag

REG. U.S. PAT. OFF.

## COLLOIDAL GRAPHITE

"dag" Colloidal Graphite is a smooth black liquid concentrate which is used as a dry film, a liquid film, a surface coating and for impregnation. Regardless of where it is used it provides many valuable physical and chemical properties, fifteen of which are listed here.



LEATHER DRIVE BELT

For instance, drive belts and other nonconductors travelling at high speed accumulate static charges which under certain conditions may constitute a hazard. This static electricity is controlled and bled-off harmlessly by a "dag"

colloidal graphite conductive film. Here properties 2, 13, 14 and 15 are utilized.

When the work rotating chuck of this large honing machine was assembled and run-in, using "dag" colloidal graphite, running-in time was reduced approximately 35%, operating temperature dropped considerably, and the danger of bearing damage due to temporary oil film failure was eliminated. Here properties 1, 3, 5, 14 and 15 are utilized.



HONING MACHINE



### YOUR JOB

Check the list of properties here. Pick out those that will help you. Tell us your problem and let our engineers give you the benefit of their experience. It is quite possible that they have already studied a parallel application.

Dag, Oildag, Aquadag, Castordag, Glydag and Prodag are registered trade marks of Acheson Colloids Corporation. Copr. 1944 by Acheson Colloids Corp.



**ACHESON COLLOIDS CORPORATION**  
PORT HURON, MICHIGAN

1	Slippery—a Good Lubricant. Softer than talc
2	Conducts Electricity
3	Withstands Temperature Extremes
4	Absorbs, Radiates and Conducts Heat
5	Maximum Purity
6	Low Coefficient of Expansion
7	Particles Bear Like Electric Charges
8	Insoluble in Acids and Alkalies
9	Black and Opaque
10	Gas Adsorbent
11	Little Photoelectric Effect
12	Miscible with Most Fluids
13	Films Adhere Tenaciously and Dry with Sharp Edges
14	Microscopically Fine Particles. Penetrates Fine Pores
15	An Excellent Suspension



### COAL TO TOTE

Typifying the acute anthracite shortage in the East are public coal stations in New York City (above), set up to dole out emergency allotments. Shivering householders are allowed 100 lb. each but must provide their own containers and haul it home. To build up hard coal stocks, Solid Fuels Administrator Harold L. Ickes has ordered mines to remain open on Sundays, while the OPA has adjusted coal price ceilings in order to allow miners double pay for Sunday work.

1943, or a total of \$138,399,710 compared with \$106,568,556 in 1942.

Life, which displaced the Saturday Evening Post as top performer among all magazines for 1942, took first place again in 1943, although the rivals both showed a 24% gain. The increase brought Life's revenue to an unprecedented \$33,903,059 and the Post's to \$29,262,756.

News magazines stood out as the biggest ground gainers in the weekly class in 1942, and last year they gained even more momentum, rolling up increases ranging from 26% (Time) to 137% (U. S. News). Also true to its 1942 trend was Liberty which lost 45% that year and was down another 29% last year.

• **Surprise to Trade**—The so-called special group of magazines surprised the trade by coming through with a 29% increase, bringing total revenue from \$13,539,470 in 1942 to \$17,463,927 last year. Travel magazines, as anticipated, brought the average down, but outdoor and sporting books, which were



hard hit in 1942, came through with healthy gains last year, as did Fortune, Town & Country, and Esquire.

Among women's magazines, the movie and romance publications and those aimed at the young wage-earners' market — Mademoiselle, Glamour, Charm—outdistanced the old standby guides to fashion and homemaking in percentage gains. But the big money still went to old-line women's magazines. The Ladies Home Journal was first again last year, rolling up a total of \$11,067,439, a 23% gain over 1942. Good Housekeeping, with a 25% gain, again held the No. 2 spot with sales of \$8,100,896.

Revenue gains for all types of magazines were frequently higher percentage-wise than gains in total advertising linage, even though not a single publication raised its space rates last year. The difference largely reflects increased use of the more expensive color advertising. • **Business Paper Gain**—National farm papers more than made up last year for a slight slump in 1942. Average gain for the group was 38%, bringing the total to \$14,164,656. Country Gentleman remained in first place, with Farm Journal close behind.

Advertising in business papers totaled 202,425 pages (revenue figures are not available) last year, gaining 25% over 1942's 162,282 pages, according to Industrial Marketing tabulations.

Volume leaders were Iron Age (up from 6,640 to 7,921 pages) and American Machinist (5,529 to 6,667), but the biggest gainers percentagewise were the aviation magazines. Aero Digest (4,167 pages) and Aviation (3,980 pages) showed the way with increases of 53% and 54% respectively.

War advertising boosted Marine Engineering & Shipping Review from 2,150 to 3,266 pages. Product Engineering owes its gain from 1,872 in 1942 to 3,123 pages last year in part to the war, and in part to the postwar interest in materials and design. Modern Plastics and Electronics also showed walloping gains—from 772 to 1,229 pages and from 1,044 to 2,415 pages, respectively.

## SETBACK FOR GIRDLES

Last fall the corset industry was promised its first break since rubber stocks were restricted to military use with the outbreak of the war. Neoprene was made available for use in girdles, and the du Pont synthetic, made into elastic thread, showed itself capable of providing a satisfactory substitute for natural rubber's two-way stretch.

But trade and customers alike were thrown back into despair last week when the Army suddenly decided that it might



## WING BLOWERS EXHAUST MOTOR FUMES AS TANKS ON LST's READY FOR INVASION BLITZ

The deadly exhaust fumes given off by the tanks, tank destroyers, jeeps, trucks, motorized artillery warming up below decks are exhausted through a large number of Wing Axial Flow Blowers on each LST landing ship. Each blower delivers 35,000 cubic feet of air per minute, at 1 inch static pressure.

So crowded is the space below decks that if the blowers ever stopped, the men working below would be dead in a few minutes. The L.J. Wing Mfg. Co. is proud of the fact that its years of pioneering in the ventilation field have thus been climaxed by one of the most important ventilation projects of our time.

**L. J. Wing Mfg. Co.** 167 W. 14th St., New York 11, N. Y.  
Factories: Newark, N. J. and Montreal, Canada

*These LST ships do not dock—they simply drive on to the beach until they ram the ground. Once beached, the ship has to stay there until all its cargo has roared ashore.*

Official U. S. Navy Photos



*As the engines start up and the traffic lights change from red to amber to green, the deep hum of the exhaust fans is heard as 35,000 cubic feet of foul fumes are sucked out into the air every minute.*



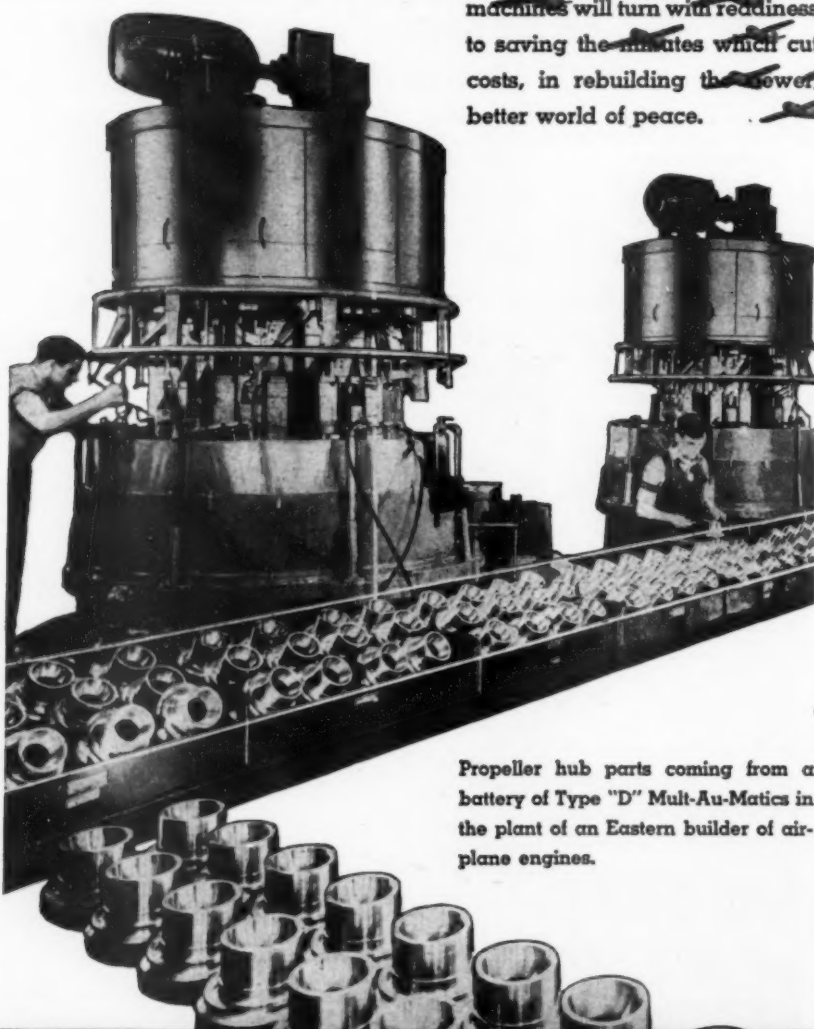


# Savings In Minutes— *Multiplied!*

You count many minutes saved on each propeller hub when the Mult-Au-Matic does the job. These total savings each day, each week, each month are reflected in our growing mastery of the air over Italy, over Germany, over the Pacific.

Factory managers count these savings. Production staffs count on the increased deliveries they bring about. And they are never disappointed—for Mult-Au-Matic production is dependable production. It is virtually continuous; chucking the work brings no stop to the several working stations.

That's how thousands of Mult-Au-Matic day are speeding the volume production we must have, to win. Once the war is done, these versatile machines will turn with readiness to saving the minutes which cut costs, in rebuilding the newer, better world of peace.



Propeller hub parts coming from a battery of Type "D" Mult-Au-Matics in the plant of an Eastern builder of airplane engines.

**THE BULLARD COMPANY**  
BRIDGEPORT 2, CONNECTICUT

need the Neoprene after all for gas masks and other invasion gear. WPB's Office of Civilian Requirements, however, says that children's sneakers and other shoes will still get this synthetic.

But WPB has reserved the foundation garment industry's quota for military use, and the only thing left to milady for services formerly rendered by the rubber girdle is Buna-S. And Buna-S has not proved nearly so adaptable to girdles as Neoprene, and while processors say it is satisfactory for garters and narrow gores, it is not workable so far for wide elastics. Hence there is little hope for an early return of the prewar girdle.

## Cheese Firms Win

Federal jury at Chicago finds no evidence of conspiracy to fix prices. Similar cases to be tried within six months.

One up, four to go, is the cheese industry's score over the U. S. Dept. of Justice since a Chicago federal jury, after 14 hours' deliberation, acquitted twelve corporations and 13 individuals charged with criminal conspiracy to fix prices paid to brick cheese producers.

• **They Say It's Impossible**—In the nine weeks' trial, Special Assistant Attorney General Daniel B. Britt had attempted to prove that the defendants fixed prices, first by informal agreement among themselves, later through the Wisconsin Cheese Exchange.

The defendants answered that the price paid for brick cheese, in a market not governmentally controlled, varies directly as the price of butter and cheddar cheese, within a range so narrow that it is economically impossible for them to fix prices.

• **Had to Meet Price**—Asked why they paid producers  $\frac{1}{4}$ ¢ more per pound than the price established on the Wisconsin Cheese Exchange, they pointed out that one cheese company paid producers  $\frac{1}{4}$ ¢ more a pound than the market price in order to obtain a drier brick cheese—36% moisture compared with the standard 42%—for making process cheese, and other companies were forced to meet this price.

• **No Evidence**—Bitter competition, not conspiracy, characterized their relationship, they maintained. The jury "found no evidence of concerted action during the period before the indictment," and concluded that price fixing, if in effect before that time, existed no longer.

Four similar cases, in which indictments date back as far as July 1, 1941, are expected to come to trial during the next six months.



# Who can buy Typewriters ... and who can't!

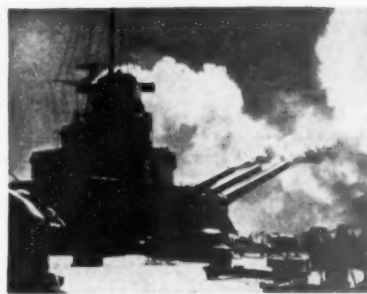
... now that Smith-Corona is resuming limited typewriter production.



"Enough Smith-Corona made rifles," said the Army last November . . . you may have seen the news releases with their flattering comments on the fine job done in making the Army M1903-A3 rifle. So Smith-Corona now returns to making fine typewriters.



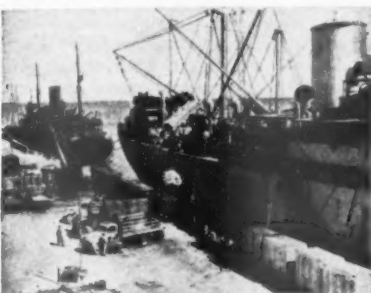
"Who can buy them?" First, of course, comes the Army. Since so few machines have been made since Pearl Harbor, the armed forces still need thousands of them, and they get first call on the L C Smith machines now in production at our Syracuse Plant.



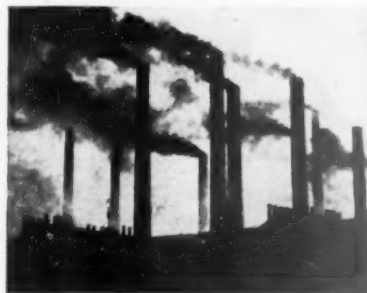
The Navy, too, has equal right to these first new typewriters. Few realize how many typewriters it takes to maintain efficiency aboard a battleship, let alone operate the largest Navy the world has ever seen. The Navy needs many more typewriters.



Lend-Lease comes next on the list of those to receive a share of these new typewriters—with several thousand machines scheduled for delivery to our allies all over the globe. They, too, need machines badly and must be supplied by American production.



A small number of L C Smiths is being allotted O. E. W. for export to certain foreign countries. America has always been the largest producer of typewriters in the world and now almost every friendly nation must look to us for this equipment.



About one out of ten L C Smiths will be allotted for essential war activities, on application to and approval from the War Production Board. For complete information see W.P.B. Conversion Order L-54-a, as amended Sept. 20, 1943.



This brings us to the normal user—the American Secretary. We know many of you need new machines. But it may still be some time before we can take care of your orders. Rationing restrictions on rental machines, however, are being relaxed.



And also the average business man, who may not be in essential war work—to you, we express our regrets at not being able to fill your orders at this time. (If your machines need adjusting or overhauling, our Service facilities are at your command.)



Groton Plant

**SMITH-CORONA**  
Typewriters

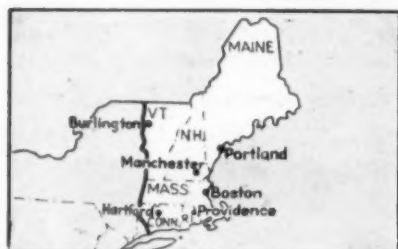
L C Smith & Corona Typewriters Inc Syracuse 1 N Y

\*Subject to possible changes in regulations subsequent to going to press; consult your local Smith-Corona Branch Office or Dealer.



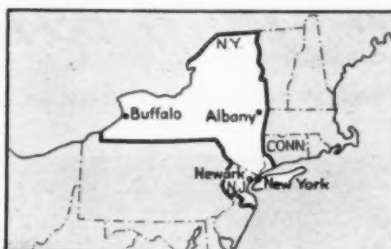
# THE REGIONAL MARKET OUTLOOK

A summary of industrial, agricultural, and other trends affecting the income and general business prospects in the twelve Federal Reserve districts of the nation for most recent month. (Last month's report: BW-Jan. 8 '44, p. 90)



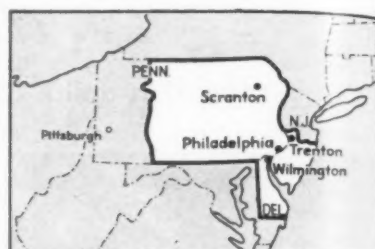
• **Boston**—Payrolls are running fairly stable, with manpower tight over-all, and shifts in contracts—for example, a cut in ordnance around Providence, a boost in aircraft at New London—thus far have had little effect even on local conditions. In general, though, over the past year or more, such formerly laggard eastern centers as Boston have shown the best gains as remaining labor reserves were put to war use.

The 1943 farm rise over 1942 was above average in Maine, about average in Massachusetts and Connecticut, below average elsewhere. The flow of feed to the region has improved, but costs are up. Previous over-expansion is now a boomerang on poultry farms, and weakened prices may loosen feeds for dairymen, who have bettered culling, breeding, and management of herds. Weather so far has been favorable for crops, but vegetable growers are awaiting clarification of ceiling price problems.



• **New York**—State war plants will need 100,000 new workers in the next six months, aside from draft and other replacements, as compared with a gain of 150,000 workers in all 1943, according to War Manpower Commission estimates, which, though they may be high, nonetheless contrast with national needs for only minor arms employment gains. This indicates that the district in general is belatedly boosting arms payrolls and drawing on labor reserves.

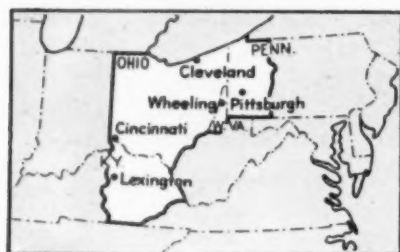
This city is leading the upsurge. Upstate, payrolls are gaining—as in Syracuse, Poughkeepsie, Rochester, Binghamton—but at a less rapid pace in Buffalo, Utica, and Albany with metal, machinery, textile, or transportation equipment work slowing down in one place or another. Northern New Jersey munitions factories are still accelerating, but also at a slower pace; ship and plane work predominates there and no major cutbacks are yet in prospect.



• **Philadelphia**—Manpower needs for arms plants have about passed the peak, helped along by explosives plant shutdowns at Williamsport and Eldred, Pa., an aluminum closing at Burlington, N. J., and a scale-down of labor needs by 3,700 and a reduction in employment of some 2,000 at metal-working plants in Philadelphia—all of which has postponed a proposed 48-hour-week order for the industrial area around this city.

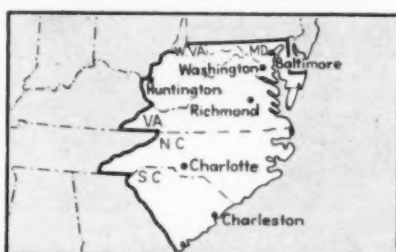
Though this is one of WPB's test reconversion areas, Philadelphia, Camden, Wilmington, Reading, Harrisburg, Allentown, Lancaster, Trenton, and other key centers are excepted from the general rule permitting plants with under 50 workers to use surplus metals for civilian goods; instead, the employment limit is 15 for these cities.

Broiler, hog, and truck crop receipts were high in 1943—though not high enough to offset the lag in dairy receipts—and district farm gains trailed the nation's slightly.



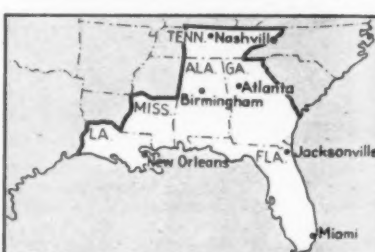
• **Cleveland**—District activity is tending to flatten out. Tool and heavy machinery work are down, pressure for steel is down, and even landing barges are hitting program peaks. The intradistrict contrast is sharp; aircraft output is still slated to rise, in western district centers from Cleveland to Toledo to Cincinnati, while the ordnance work on which eastern-half cities specialize is to be cut, as has already happened recently at Meadville, Pa.

Reconversion plans are to the fore. The district is one of WPB's test areas, though most cities outside southeastern Ohio and eastern Kentucky still lack the labor for even much small-plant civilian work. However, auto parts plants expect to boost output, and appliance makers hope they're next. Pittsburgh is counting on rubber plants—from synthetics through textiles to tires and other products—to balance heavy industry after the war.



• **Richmond**—Coastal areas, especially in the south, will lose war gains from Army camps as half the soldiers in the U. S. move overseas in 1944. With farm gains in 1943 below the nation's in the Carolinas and about average in northern states, the district's overall income curve is losing ground relative to the national total.

However, rayon facilities are being expanded at Front Royal, Va., Clemson College, S. C., and at some of the ten Appalachian cities in the district (mostly in Virginia) which now boast half the nation's capacity, and a 30,000-worker payroll. Indeed, the district's expanding peacetime specialties—rayon, cigarettes, paper, furniture, chemicals—will in general enter the postwar period with considerably expanded capacity and enlarged markets. And now, Maryland, Virginia, and West Virginia will experiment with the War Production Board's test reconversion.



• **Atlanta**—This city has just been put on a 48-hour week, reflecting setbacks in aircraft activity over the district generally. But Knoxville is the latest center to suffer an ordnance cutback. Shipbuilding is steady—with Tampa and Jacksonville labor needs combining with Miami, St. Petersburg, and other tourist activity to tighten manpower all through Florida.

Citrus workers' wages will be high, as will receipts from this year's larger crop. Returns from livestock products, peanuts, and soybeans more than cushioned the lag in cotton income in Georgia and Alabama in 1943, and lifted other states' gains as well. A freeze halted naval stores production in December, and January and February output is expected to be low.

But Army camp towns all through the district will be depopulated of half their soldiers this year, accelerating an existing trend (BW—Nov. 13 '43, p. 100).



# K- -A GUIDE TO INCOME TRENDS

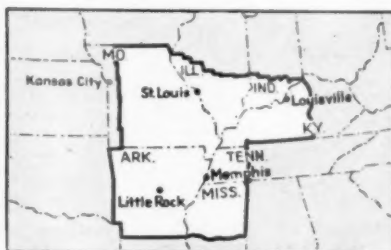
Labor supply tightens in some areas; cutback fears diminish; "test" regions plan reconversion; employment needs stabilize generally. Dry weather spreads to new farm sections even as others enjoy drought-breaking rains.



• **Chicago**—While heavy marketings of cattle, and especially hogs, continue, farm sections have piled up a backlog of dry weather which has drained off subsoil moisture, in turn endangering feed crops for livestock. Wheat has already been hit, and hay and corn soon may be. And stocks of feeds already are being drained away. So, the liquidation of livestock may be heavy later in the year.

War-time reconversion is proceeding in locomotive, farm equipment, truck, tire, and other plants, tending to reduce the physical dislocations which will follow Germany's defeat; in short, it's of future, rather than immediate, income significance. Detroit odds are against 1944 auto reconversion, despite talk to the contrary.

Right now, this city is the center of quickening arms activity, with labor tightening up sharply. Detroit and Indianapolis have about hit manpower ceilings.



• **St. Louis**—Cutbacks will release 3,000 workers each here and in Evansville and will reduce Arkansas' aluminum work. But this news is minor compared with previous reductions, which hit here unusually hard, but meantime, other war work is rising. Too, Missouri, western Kentucky, and Arkansas are slated for test reconversion in plants with less than 50 workers; only labor-tight Louisville is excepted.

Among "peacetime" lines, coal output in southern Illinois and Indiana is now ahead of year-ago levels, but oil production there is behind. Shoe activity is off less sharply than elsewhere; as is lumber employment. Distilleries are still active on war alcohol, despite a late-1943 easing, and new steel furnaces are now in operation. Meat packers' capacity is being strained by extremely heavy hog shipments—at weak prices—but cotton ginning volume is off as compared with a year ago.



• **Twin Cities**—Recent mild weather helped livestock shipments and raised hopes for early Lake shipping, though the accompanying drought did hit the few remaining winter sports, and damaged winter grains. In general, these are "resting" months in this region, though the war has stepped up somewhat the volume of off-season activity. Iron mines are stocking ore, lumber camps hunting workers, shipping firms hoarding sailors, shipyards sustaining output. Wholesalers are busier than usual with buyers from outlying towns.

Farm receipts this year are apt to be above 1943's; but weather will prove a better guide to farm buying habits. For crop and livestock receipts will balance one another—the worse feed crops fare, the more livestock will be sold off. Montana plains country, northern North Dakota, South Dakota, and central Minnesota topped rural retail sales gains in 1943.



• **Kansas City**—Recent weather has helped some winter wheat areas, hurt others. Feed problems afflict livestock men, with cattle feeding down and hogs being sold off. In general, weather holds the key to 1944 farm prospects, not only as regards wheat, but feed crops, and so livestock, also. Right now, they are not promising; subsoil moisture is well below normal.

While Kansas City has yet to meet scheduled boosts in employment, Oklahoma City is past its manpower peak. In Wichita, trainer plane output is declining while super-fortress production is climbing; a big Tulsa plane plant is shut down during retooling. Kansas and Nebraska are test reconversion areas.

Postwar thinking is on the problem of how to hold major wartime industrial gains; tires, chemicals, aviation are possibilities, but the prospects for other work also are being investigated.



• **Dallas**—Concern over further ordnance cutbacks has been allayed, at least until after the invasion; payrolls in most centers are now stable; Amarillo, Brownsville, and San Angelo now no longer expect acute labor shortages. Oil output is steady, though new pipelines soon will go into operation around Lubbock. Aircraft work is still rising in and around this city. Western Army towns especially will feel the major soldier outflow overseas in 1944.

Snow and rains last month broke the drought here at least temporarily, improving subsoil moisture, benefiting Panhandle wheat, and bettering western livestock ranges. But feed is still short, and 28% fewer cattle and 60% fewer sheep are "on feed" than a year ago, with marketings heavy, prices weak. Southern truck areas of Texas, New Mexico, and Arizona are having a profitable season, helping such towns as Brownsville, Laredo, and Phoenix.



• **San Francisco**—Because shipyards now employ almost 600,000 workers on the Coast—nearly twice the total for aircraft—the industry's prospects for 1944 are all-important. The recent statement by this city's War Manpower director, authorized by the Maritime Commission, was that local contracts would not be cut back at least before October, and that even should a change occur, ship repair would absorb all released workers. Within limits, this assures the district outlook for most of 1944. Main uncertainty now lies in the pace of post-Hitler ship cutbacks.

The mild winter has sustained northwest lumber output almost at summer levels. Hospital, barracks, and similar facilities are being built for Pacific military use, both locally and overseas. Some expansion for the alumina, gasoline, and rubber programs is still going on. Citrus, potato, and vegetable crops are up.



**BUY QUALITY**  
CARBON PAPER  
ROLL PAPER  
RIBBONS

**SAVE 10% TO  
40% THROUGH**  
**BURROUGHS  
DISCOUNT  
PURCHASE  
PLANS**

Burroughs' intimate knowledge of business machines in action established the exacting specifications of quality which have always been characteristic of Burroughs supplies for business machines of all types and makes.

These supplies are available to you under Burroughs Discount Purchase Plans at savings of 10% to 40%. You enjoy the best in these fine supplies (and, incidentally, save storage space) because Burroughs delivers them *fresh* to you as you need them.

For full details, call your local Burroughs office or write Burroughs Adding Machine Co., Detroit 32, Mich.



**Burroughs**  
SUPPLIES FOR  
BUSINESS MACHINES

BURROUGHS ADDING MACHINE COMPANY

## LABOR

### Index Assailed

A. F. L. and C. I. O. unite in attack on government's cost-of-living figures as too low. Rise in c. of l. put at 43.5%.

A big gun in the labor campaign to destroy the Little Steel wage limitation formula was brought into position this week when union leaders began to make speeches replete with quotations from the "Recommended Report for the Presidential Committee on the Cost of Living."

• **Minority Report**—This 75-page document is the production of union statistical and research workers and has been issued over the signature of R. J. Thomas for the C.I.O. and George Meany for the A.F.L.—labor members of the committee of five which President Roosevelt appointed to investigate the accuracy of the Bureau of Labor Statistics' much debated cost-of-living index.

The committee as a whole has not yet submitted its report, nor have there been any other minority expressions.

• **The Official Line**—The Thomas-Meany report, which is already identified as the official A.F.L.-C.I.O. line, maintains that the cost of living has risen at least 43.5% from January, 1941, the base date for the Little Steel formula. The BLS index records a rise of 23.4% for the same period and is used by NWLB to justify the formula

which permits a 15% wage increase over January, 1941, pay levels.

The A.F.L. and C.I.O. claim the report is based largely on data supplementary to those used by the BLS, that it was gathered from government, labor, and business, and from first-hand field surveys. Failure of the BLS index adequately to reflect living costs is due, say the report, to four main deficiencies. The union's account of these deficiencies may be summarized as follows:

(1) BLS does not adequately cover food cost increases, which it places at 40.2%, while the actual figure is 74.2%. This is due not only to failure of the index to cover a sufficient number of commodities, but also to the fact that OPA price control and subsidies are mainly effective on those food items that are covered by the index. Thus, the items not covered in the index are not sufficiently controlled, and the price increases that take place among them are not in turn reflected in the index.

Other deficiencies of the index on foods include failure to take quality deterioration and upgrading into account, failure to note absence of week-end sales, failure to take price ceiling violations into account, and the like. In addition, the index bases its findings on returns from only 34 of the largest cities (56 cities on food).

(2) The index does not take into account disappearance of cheaper items and the shift to higher-priced lines. This is most striking in clothing, and is also a large factor in house furnishings, food, and housing.

On clothing, the report shows that workers' costs have risen 72.2% since 1941, more than double the 33.7% shown by BLS. This 72.2% increase is arrived at by surveys of the total value related to the total quantity of

### What's Happening to the Cost of Living

	Food	Clothing	Rent	Fuel, Ice, & Electricity	House Furnishings	Misc.	Total Cost of Living
August, 1939 .....	93.5	100.3	104.3	97.5	100.6	100.4	98.6
January, 1941* .....	97.8	100.7	105.0	100.8	100.1	101.9	100.8
December .....	113.1	114.8	108.2	104.1	116.8	107.7	110.5
December, 1942 .....	132.7	125.9	108.0	106.3	124.1	112.8	120.4
January, 1943 .....	133.0	125.9	108.0	107.3	123.7	113.1	120.6
February .....	133.6	126.2	108.0	107.2	124.1	113.6	121.0
March .....	137.4	127.6	108.0	107.4	124.5	114.5	122.8
April .....	140.6	127.9	108.0	107.5	124.8	114.9	124.1
May .....	143.0	127.9	108.0	107.6	125.1	115.3	125.1
June .....	141.9	127.9	108.0	107.7	125.4	115.7	124.8
July .....	139.0	129.1	108.0	107.6	125.6	116.1	123.9
August .....	137.2	129.6	108.0	107.7	125.9	116.5	123.4
September .....	137.4	132.5	108.0	107.7	126.3	117.0	123.9
October .....	138.2	133.3	108.0	107.9	126.7	117.6	124.4
November .....	137.3	133.5	108.0	108.0	126.9	117.7	124.2
December .....	137.1	134.6	108.1	109.5	127.9	118.1	124.4

Data: U. S. Bureau of Labor Statistics; 1935-39 = 100.

\* Base month of NWLB's "Little Steel" formula.



nothing sales and by taking into account quality deterioration, upgrading and disappearance of low-end items, and sales above ceiling prices.

(3) The index underestimates the amount of increase in rents between January, 1941, and December, 1943, by at least twelve percentage points. According to the index, the increase is 3%; according to the findings of the report, the true increase is 15%.

This failure to reflect the real increase is due to: (a) sampling only large cities; (b) sampling only within city limits; (c) gathering, until recently, rent information only from large rental agencies, rather than from tenants; (d) not including rent increases due to creation of new housing units; (e) not including rooming houses, boarding houses, trailer camps, and light housekeeping apartments; (f) not measuring deterioration in quality of housing; (g) ignoring rent ceiling violations and the rise in prices of homes.

(4) The BLS figures show increases in costs of house furnishings at 27.8%, as against an actual increase of more than 62%. Quality deterioration and the disappearance of low-end items were particularly marked in house furnishings, and the official index does not take them into account.

• **Subsidiary Objections**—In addition to the four main deficiencies which the labor report cited, a number of others are mentioned, including black markets, dual residences maintained by war workers, increased taxes, etc.

• **"Partisan Document"**—Immediately upon the release of the labor report, government officials charged that it was a partisan document, that its statistics were suspect. Acting Commissioner of Labor Statistics A. F. Hinrichs pointed out that the index had recently been thoroughly analyzed by the American Statistical Assn. and had been given substantial approval (BW—Oct. 30 '43, p112). BLS will go over the labor data and report to the Senate Committee on Education & Labor.

No matter what the report's eventual status may be, it has already become the rationale for the concerted union campaign to break existing wage ceilings.

## NWLB on Carpet

For once it is unable to convince a court that its power ends at White House door. U. S. Gypsum seeks injunction.

Since it was created in January, 1942, the National War Labor Board has been afraid of the courts.

If an employer or union objecting to a decision could secure a court review of a board decision, the agency might find itself tied into fancy knots by fancy lawyers—as impotent as the National Labor Relations Board during the hectic days before the Wagner Act



While our ship was on the ground, I spied a Breeze ignition shield and told the mechanic, 'I used to build 'em'. He grinned and said, 'Best damn shield there is, and with that my chest expanded

to twice normal. A compliment like that from a motor doc reflects the swell job you folks are doing back home there on the production line. Keep it up!

Excerpt from a letter written by a former Breeze worker, now in our armed forces.

## -what's in a Name

It All Depends on Past Associations and Present Circumstances

There's plenty in a name—when it's the familiar trademark of an old employer, and a man runs across it thousands of miles from home.

It means a lot to him then, because he knows first-hand of the skill and experience that went into the manufacture of the product, of the inspections that it went through before it was judged worthy to wear that trademark.

And then he realizes what that name represents—the pride of a manufacturer in a product, confidence in the future of the enterprise. The trademark becomes a symbol of opportunity for the day when men will resume their places once again in a peacetime world.

That's what's in a name—a reminder of the past and a promise for tomorrow.

**Breeze**  
CORPORATIONS, INC.  
NEWARK, NEW JERSEY



PRODUCTION FOR VICTORY • PRODUCTS FOR PEACE





**PROTECT**  
*that goal!*

**F**ORESTALLING every opposing move—that's the hockey player's job!... And where peak production is the goal, Hardware Mutuals *policy back of the policy* provides alert protection in forestalling plant accidents.

The *policy back of the policy* has vital significance for policyholders, for it is a way of doing business that makes their interests our first consideration. When applied to Workmen's Compensation and Liability insurance, it explores the hazards of each individual plant and provides a complete plan of accident prevention. It helps to send production up, and operating costs down. Claim settlements are speedy and sympathetic.

In other types of insurance, such as Automobile, Fire and allied lines, Burglary, Plate Glass, General Liability, etc., the *policy*

*back of the policy* assures full standard protection at low cost. Every year, for more than 30 years, careful selection of risks has meant substantial dividend savings for policyholders. These now total over \$82,000,000.00. Sound, helpful advice and service are provided by experienced, full-time representatives.

Consider carefully what the *policy back of the policy* may mean to you in better service, lower cost. Send today for a free copy of our book, **INDUSTRIAL SAFETY PROCEDURE**. You'll find it highly revealing, and invaluable for reference.

**FEDERATED HARDWARE MUTUALS**  
Hardware Dealers Mutual Fire Insurance Company, Home Office, Stevens Point, Wisconsin  
Mutual Implement and Hardware Insurance Company, Home Office, Owatonna, Minnesota  
**HARDWARE MUTUAL CASUALTY COMPANY**  
Home Office, Stevens Point, Wisconsin  
LICENSED IN EVERY STATE



# Hardware Mutuals

Stevens Point, Wis. • Owatonna, Minn. • Offices Coast to Coast

Compensation, Automobile and other lines of non-assessable

**CASUALTY AND FIRE INSURANCE**

was declared constitutional by the Supreme Court.

● **A Pat Formula**—To keep out of court, NWLB developed a pat formula. It has no power, the board has told the courts on a number of occasions. Its actions are only advisory. If the parties do not want to accept a board decision, the board can do nothing but refer the matter to the President for "such action as he may deem appropriate."

Until recently, this technique has worked; judges have dismissed petitions for injunctions from employers who defied the board, on the ground that there was nothing to enjoin since the board has no power to make its orders stick.

Jesse Freidin, NWLB general counsel, explained: "The board is not a policeman; it's a court."

● **One Court Balks**—Signs of trouble ahead appeared last week in District of Columbia federal court when U. S. Gypsum Co. asked for an injunction to prevent the board from enforcing a maintenance-of-membership order. The board's defense followed the pat formula of previous cases—although some press reports excitedly labeled it a new policy—but this time the court refused to accept it and set the case down for trial.

The board promptly notified the court that it would ask the Circuit Court of Appeals to hear an appeal from the ruling, indicating that it was prepared to take the battle up to the Supreme Court if necessary.

● **Other Suits Filed**—In line behind Gypsum are similar suits by three other employers: Montgomery Ward & Co. (involving stores in Denver, Detroit, and New York), Peyton Packing Co., El Paso, Tex., and Twentieth Century Brass, Minneapolis, Minn.

Sewell L. Avery who has fought the board more bitterly than any other employer heads both U. S. Gypsum and Montgomery Ward.

If Gypsum succeeds in getting a hearing and prevails, the board expects a flood of similar suits.

Board officials insist, however, that it is free to turn any compliance case over to President Roosevelt for executive action regardless of its court status. But the board has refrained from doing anything about the four employers who went to court.

● **Most Are Settled**—Otherwise, compliance has not proved much of a problem to NWLB. A miscellaneous collection of 30 to 40 so-called compliance cases develops each month, but officials have been able to settle all but a few by telephone or by conference without asking the full board to send them over to the White House for presidential action.

Officials believe that the situation has





1. How do our far-flung convoys find their way through thousands of miles of trackless seas?

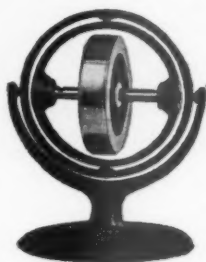


2. How can an oil-well drill be steered through rock in any desired direction a mile underground?



OFFICIAL U. S. NAVY PHOTO

## This mysterious wheel makes all these things possible



This mysterious wheel is a gyroscope.

When set in motion, it constantly maintains a fixed position in space . . . pointing straight as an arrow in whatever direction it is set.

It gives man a sort of *sixth sense*—a sense of direction that frees him from dependence upon landmarks. It has made possible the development of devices so uncanny that it's hard to believe your eyes when you see them in operation.

These devices are comparatively new. It was only 33 years ago that Sperry made a successful test of the first Sperry Gyro-Compass. This compass greatly improved the accuracy of navigation because it points to *true north*.

Sperry, a firm of creative engineers whose chief interests lie in solving new and difficult technical problems, continued to experiment with the gyroscope. The result was the development of a large number of tools for war and peace based on the gyroscope.

For example, the gyroscopic devices which solve the problems stated under the pictures, were all invented by Sperry.

1. The Sperry Gyro-Compass guides precious American convoys to port.
2. A gyroscopic device—Invented by Sperry—enables men to control oil-well drills a mile underground. (You can

start drilling an oil well on shore and tap oil half a mile out to sea.)

3. The Sperry Directional Gyro and the Gyro-Horizon help guide our pilots through fog and darkness. The Sperry Automatic Gyropilot relieves the human pilot, holding the plane on its course with no hand on the controls.

These are but a few of the many uses of the gyroscope . . . most of which have been pioneered by Sperry.

At present, naturally, we are concentrating on the uses of the gyroscope as a tool of war . . . just as our work with hydraulics and electronics is now devoted to war uses. After the war, we shall resume the production of gyroscopic, hydraulic, and electronic equipment which will serve an America at peace.

★ Let's All Back the Attack! ★  
Buy More Bonds

**SPERRY**  
CORPORATION

30 Rockefeller Plaza, New York 20

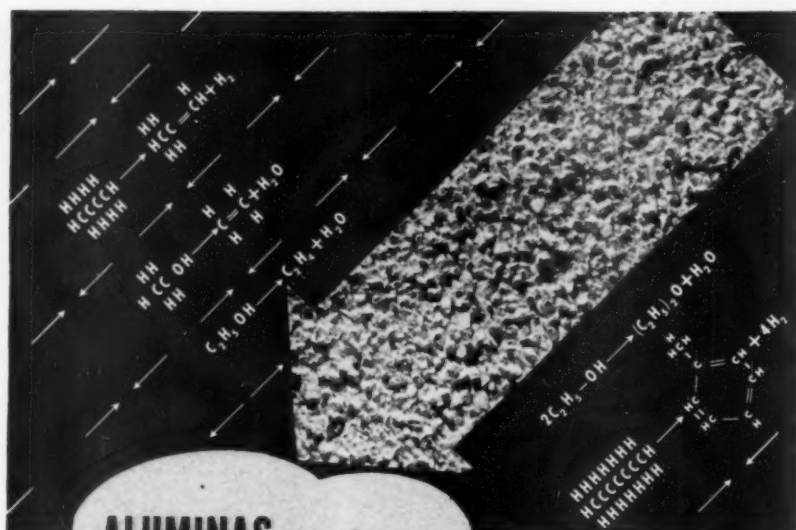
FORD INSTRUMENT CO., INC.  
SPERRY GYROSCOPE CO., INC.  
VICKERS, INC.

Waterbury Tool Division, VICKERS, INC.

3. What guides airplane pilots through fog and darkness? What holds the plane on course with no hand on the controls?

by the S  
p out  
it formul  
has tol  
occasion  
v. If the  
at a board  
nothing be  
sident for  
m appr  
nique ha  
petition  
s who de  
that there  
the board  
ers stick  
ral coun  
is not a  
f trouble  
District of  
n U. S.  
nction to  
forcing a  
der. The  
t formul  
me pres  
w policy  
ed to ac  
for trial  
the court  
Court of  
the rul  
pared to  
ne Court  
behind  
ee other  
& Co.  
Detroit  
ng Co.  
Century  
ght the  
her em  
um and  
a hear  
pects a  
that it  
use over  
tive ac  
s. But  
ng any  
s who  
compli  
prob-  
collec  
pliance  
officials  
a few  
without  
n over  
ial ac  
on has  
1944





**ALUMINAS** may give your  
catalytic reactions a boost

Catalysis of such vital products as high octane gasoline, synthetic rubber, plastics and explosives is being carried on with the help of Alorco Aluminas. They are serving as catalysts, carriers and auxiliary catalysts. Aluminas have extremely large surface areas. They are strong and stable. Aluminas are pure, so there is less likelihood of side reactions and poisoning. You may have samples of any of the aluminas for trial in your own processes. Write ALUMINUM COMPANY OF AMERICA (*Sales Agent for ALUMINUM ORE COMPANY*) 1935 Gulf Building, Pittsburgh, Pennsylvania.

*Alorco Activated Aluminas are also assisting in certain catalytic reactions by drying the gases or organic liquids involved before they enter the catalyst chamber. This increases the efficiency and yield of the reactions.*

#### These Aluminas are suitable for catalytic purposes

##### Activated Alumina

##### ACTIVE TYPES

This is a catalytically active material when used alone or as a catalyst support. The pores of the granules occupy 50% of the particle volume.

##### Hydrated Alumina C-730

This Alumina is active after an original heating to 500° F. It has finer particles and greater surface area than are obtainable with ground natural materials.

##### Tabular Alumina

##### INACTIVE TYPES

This alumina is a porous form of granular corundum produced from pure aluminum oxide. It is a substantially inactive catalyst carrier. Close mesh sizes are obtainable.

##### Monohydrated Alumina D-50

This is a substantially inactive powdered Alumina having crystal structure different from the usual Aluminum Trihydrate. The average particles are 1 micron in diameter.

## ALUMINUM ORE COMPANY



*Aluminum and Fluorine Compounds*

remained under control because President Roosevelt authorized the board to call on Economic Stabilization Director Fred M. Vinson for use of indirect sanctions—denial of priorities, gasoline, and the like—for refusal to comply. Although this power has not been used, the board feels that employers who know that they are too small to be sent to the White House to be taken over by the President feel that they may still get into plenty of trouble if they kick.

## Union Unites

In face of new C.I.O. threat, unaffiliated utility union ends its family quarrel and retraces its impeachment steps.

Proving again that one of the most compelling reasons for the existence of independent unions is the distaste which some workers have for the C.I.O. and the A.F.L., rather than undue affection which they might have for their company, Pittsburgh's big unaffiliated utility union, rent by internal dissension and apparently on the verge of splitting apart, has submerged its factionalism and closed ranks in the face of a C.I.O. threat to invade its domain.

● **Dispute Over Sitdown**—The Independent Assn. of Employees of Duquesne Light Co. & Associated Companies, operating in the Pittsburgh area, began washing its linen in public as the result of a strike last month of 350 billing clerks and meter readers.

For ten days, the sitdowners refused to budge from their demand for removal of a veteran supervisor, accused of being arbitrary and of ignoring pay increases provided in the union's contract.

When the sitdown threatened to spread into a union-wide walkout of 4,000 electric utility workers, the executive committee of the union ended the stubborn strike on the company's promise that it would keep a check on the supervisor.

● **President Dissented**—Last week, after the strikers returned to work, it was disclosed that George L. Mueller, one of the founders of the union in 1937 and now serving his fifth term as president, was the lone dissenter to the settlement of the walkout; he had held out for removal or transfer of the supervisor. The strike's end touched off some complicated maneuvering of the union executive committee to impeach Mueller, who, in turn, announced he had dismissed the committee.

Among the chief allegations against Mueller were that he failed to carry out negotiations for wage increases in



ause Pres-  
the board  
of Direc-  
of indirect  
gasoline,  
mply. Al-  
een used,  
who know  
ent to the  
er by the  
ll get into

threat,  
ends its  
nces its

he most  
tence of  
te which  
.O. and  
affection  
eir com-  
ed util-  
ssion  
plitting  
onalism  
C.I.O.

ndepen-  
iquesne  
es, op-  
egan  
e result  
biling

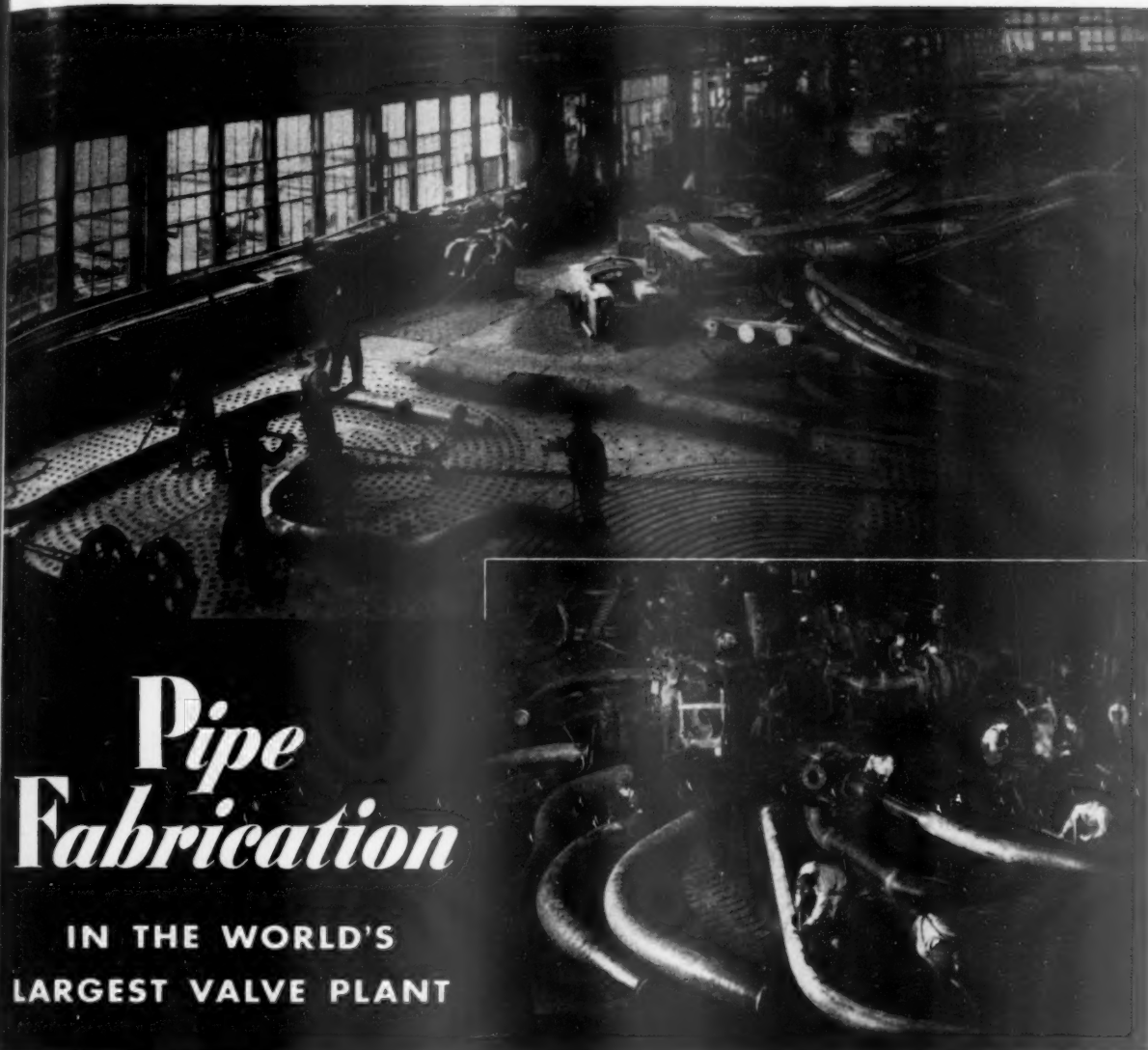
refused  
removal  
being  
creases

ed to  
out of  
execu-  
ed the  
prom-  
n the

after  
as dis-  
me of  
7 and  
dent,  
ment  
or re-  
The  
mpli-  
xecu-  
eller,  
dis-

ainst  
carry  
es in

1944



# Pipe Fabrication

IN THE WORLD'S  
LARGEST VALVE PLANT

**S**TEP onto the pipe bending floor at Crane's Chicago Works almost any time of the day or night. Here you will find lengths of pipe from twelve inches to twenty feet long—some of them so big a man could crawl through them. These pipes are being bent, twisted, shaped into form—as simple as an elbow—as complicated as a pretzel.

In an adjacent department these shapes, together with other straight lengths are being cut, threaded, flanged and welded—changed into headers or other special purpose piping. And all of this fabrication is held to close tolerances—produced with the high degree of accuracy made possible by Crane's years of experience in pipe bending and fabricating.

In the crowded hold of a man of war—on the decks of an oil tanker—in modern refineries—on the nation's pipe lines, the need for fabricated piping, held to extreme precision, is almost unlimited. Today, Crane is helping fill this need.

Tomorrow the facilities of Crane's pipe fabrication department will be available to peacetime industry to aid in conversion from war to the development of new industrial production.

CRANE CO., 836 South Michigan Avenue, Chicago 5, Illinois



# CRANE VALVES



1943; that he acted in an arbitrary manner at various times; that he failed to fulfill promises in connection with a proposed organization of a national independent electrical workers union in 1942 (BW—Aug. 1 '42, p54); and that at no time had he acted in good faith to settle the dispute that led to the sit-down.

• **C.I.O. on the Scene**—While the union's general committee was heatedly debating whether the question of Mueller's impeachment should be presented to the membership, an old enemy reappeared. The C.I.O. Utility Workers Organizing Committee filed petitions with the National Labor Relations Board seeking bargaining rights for 1,400 production and maintenance employees and 200 plant protection workers of the Duquesne Light Co.

In the face of this danger from without, the committee, at another all-night session, voted against impeachment proceedings so as to close its ranks against encroachment by the C.I.O.

• **A Single Break**—With one exception, the independent union has resisted successfully attempts by the C.I.O. to win bargaining rights for employees of the Duquesne Light Co. The lone C.I.O. victory came in 1942 in a Pennsylvania labor relations board election among 300 employees of the Colfax power plant, near Pittsburgh.

But ever since its organization in 1937, the independent has been opposed by the C.I.O., which charged again and again that the union was company-dominated. After a three-year fight, the state board dismissed charges of company unionism, and in 1940, the independent was granted a charter by the courts. The C.I.O. boycotted an election which the state board conducted in May, 1940, and the independent won overwhelmingly. In October, 1941, the independent set up permanent headquarters, put its president on a full-time, salaried basis, and raised dues from \$4 to \$6 a year.

• **Brawling With A.F.L.**—On another front, the independent has had a continuous jurisdictional fight with the A.F.L. International Brotherhood of Electrical Workers. Various construction jobs have been kept in turmoil as the independent fought to maintain jurisdiction in installing high-tension wiring; secondary low-tension wiring is installed by other workers.

The highlight of the last such fight, won by the independent a year ago, was a traveling utility pole, which was moved by A.F.L. members to make room for some construction work. Independent union members dug up the pole, moved it 15 ft., dug it up again, and returned it to within a foot of where it was originally.

## Unions in Court

Rival leather workers are slugging it out under civil penalty provision of Connally-Smith act. Damages are claimed.

Litigation under the civil penalty provision of the War Labor Disputes (Connally-Smith) Act was started in the Boston area this week as C.I.O.'s International Fur & Leather Workers Union sued a rival organization affiliated with the A.F.L. for \$25,000 damages as a result of a strike in the Salem-Peabody (Mass.) district last November (BW—Dec. 4 '43, p86).

• **Damages Specified**—The C.I.O. union charged in a 158-page complaint that 297 of its members lost \$15,929 in wages, that the union lost \$3,000 in dues, was forced to spend \$5,000 on the strike, and suffered \$1,000 damages to a truck which the union bought to deliver coal to the struck factories during the walkout.

Defendants are 29 officers and members of the National Leather Workers Assn., an independent body which affiliated with the United Leather Workers International Union (A.F.L.) after the government ended the 16-day strike by sending troops into 13 tanneries on Nov. 24.

• **Shifted Affiliation**—The strike was a protest against the discharge of three leather workers for transferring their union membership from the C.I.O. to the independent group. Under its closed-shop agreement with the major tanneries in the area, the C.I.O. union has refused to reinstate the three discharged leather workers until they have paid up their back dues.

Into the turmoil created by the strike has been introduced another conflict. The C.I.O. contract stipulates that the State Board of Arbitration & Conciliation shall demand the discharge of workers who fail to pay union dues. But the state board questions whether it has authority to enforce such a clause and has urged the union to revise the clause to the extent of vesting another agent with that power.

• **Watching Closely**—Members of the A.F.L. union are watching this maneuver closely. They insist that any attempt to modify the contract will terminate it, and they then will ask the National Labor Relations Board to determine whether the C.I.O. still has a majority.

Additional outbreaks of union rivalry are expected in the Norwood and Woburn areas this spring, because union contracts expire in April.

## Mail Call... Plywood cases with letters from home!

U.S. MAIL  
BOX NO.

DOUGLAS FIR  
PLYWOOD

Real Lumber  
MADE LARGER, LIGHTER  
SPLIT-PROOF  
STRONGER

• Now—a portable, sea-going mail-box of Douglas Fir Plywood cuts hours—sometimes days—from the delivery time of mail for our fighting men overseas. Built of inch-thick Exterior grade Plywood, this special mail locker is weatherproof and watertight. It's carried "top side" instead of in the hold... is the last thing aboard and the first thing ashore. Just one of many war-time uses for strong, rigid, durable Douglas Fir Plywood—the "miracle wood" that will be your most versatile post-war construction material. Write, Douglas Fir Plywood Association, Tacoma, 2, Wash.

PER POUND, STRONGER THAN STEEL



ourt  
kers are  
il penalty  
Smith ad

enalty pro  
utes (Con  
ed in the  
O.'s Inter  
ers Union  
iated with  
ages as a  
n-Peabody  
er (BW-

O. union  
aint that  
5,929 in  
3,000 in  
0 on the  
ages to a  
o deliver  
ring the

d mem-  
Workers  
ch affli-  
Workers  
fter the  
rike by  
ries on

was a  
three  
their  
O. to  
closed-  
anner-  
on has  
arged  
aid up

strike  
fflict.  
t the  
cilia-  
e of  
But  
has  
and  
ause  
gent

the  
ma-  
at-  
ter-  
the  
de-  
s a

ly  
o-  
on

4

# The Tent Heater that burned up Goering

**One of the unpleasant surprises** that greeted Herr Goering's Luftwaffe recently was a strange new gadget that looked like a baby locomotive. It was a surprise to us at Taylor Instrument too, because we'd been told those special Taylor Thermometers we were rushing through were for a "tent heater." And guess what it turned out to be!



**2 A Smoke Generator!** Still tame enough sounding indeed. But in the hands of the Chemical Warfare Service it's a mighty weapon. A special liquid is mixed with steam to spread a cloak of invisibility under which our troops can go almost anywhere with a minimum of casualties.



**3 It must burn the Germans up plenty** to fight an enemy they can't see. But what particularly annoyed the Nazi Air Force was the use of smoke against their bombers. A German pilot over a North African port complained over his radio, "No use bombing that place. Too much smoke!"



**4 Smoke has already saved** thousands of American lives, and will save many more in tough spots like this. Naturally we're proud to have helped, just as we're happy to have supplied the Medical Corps with so many Taylor Fever Thermometers and blood pressure instruments.



**Taylor Instruments**

**MEAN ACCURACY FIRST**

IN HOME AND INDUSTRY



**5 All this** means precious few Taylor home instruments (except fever thermometers) till the war is won. If you're in industry chances for new instruments are now much brighter. Taylor Instrument Companies, Rochester, N. Y., and Toronto, Canada. P.S. How about an extra War Bond?



# "All right, What's Next?"



ACROSS the drafting boards and through the Contract Division of the Taft-Peirce Manufacturing Company moves an endless train of special machines and products, as well as the tools with which to make them . . . design, development, and production for other plants in every line of industry, *including yours*. Seldom are any two of these problems similar, yet they all encounter here a common denominator of experience which translates them into practical, workable form, whether it involves a single part or production lots of complete mechanisms or machines.

This exceptional breadth of experience in pre-war industry has given Taft-Peirce an equally broad opportunity for service in the war effort, without restriction to any one type of work. Taft-Peirce offers ever new and specialized knowledge and skill to manufacturers who need to supplement their own capacity or who require the aid of actual experience in the use of tomorrow's materials and methods. If you have a problem in design, development, tooling, contract manufacturing, you are invited to:

## Take it to Taft-Peirce

THE TAFT-PEIRCE MFG. COMPANY

Manufacturers of Machine Tools  
Aircraft Service Equipment



WOONSOCKET, RHODE ISLAND

Small Tools • Gages • Reamers  
Magnetic Chucks, etc.

DESIGNERS AND CONTRACT MANUFACTURERS OF TOOLS AND SPECIAL MACHINES

## Strike Threatens

Montgomery Ward's new defiance of NWLB brings strike talk from union. Company asks federal court to void order.

"A company like this makes the no-strike pledge impossible. I think the only way to deal with it is to strike."

That was the comment this week of Samuel Wolchok, president of C.I.O.'s United Retail, Wholesale & Department Store Employees Union, upon being informed that Montgomery Ward & Co. had defied another National War Labor Board order involving Wolchok's union and the mail order firm's giant Chicago warehouse and retail store.

• **Result of NWLB Action**—Ward's latest action resulted from NWLB's decision to hold in force for 30 days the famous contract that was signed in December, 1942, at the repeated direction of President Roosevelt (BW—Dec. 25 '42, p98). This contract, although bearing the signature of Ward officials, was never acknowledged by Ward to be a legal document.

When that contract expired last December, Ward notified the union that it would not be continued, that the company would not bargain with the union for the mail order unit and the retail store because, it claimed, the union no longer spoke for a majority of the employees.

• **Dual Warnings**—The ensuing dispute went to NWLB, and the board issued its 30-day order, directing the union to proceed, in the meantime, to clear up its majority status with the National Labor Relations Board. The union was warned that if it did not proceed with despatch, the contract would be terminated. The company was warned that if it stalled NLRB proceedings, the contract would be extended.

Presumably because the employer, in the course of its relationship with the union, has raised so many delaying objections, U.R.W.&D.S.E. asked Ward a categorical question. In essence this was: If the union should win another NLRB election, would the company promptly, and in good faith, enter into bargaining to negotiate a contract?

• **Company's Reply**—In a letter to the union in reply, John Barr, manager of labor relations for the company, wrote that Ward "has rejected that portion of the National War Labor Board's orders of January 15, 1944, which would operate to extend the provisions of the



# DESTINATION SECRET!



**.. but she's got what it takes to get there!**

**E**SPECIALLY designed to carry thousands of American fighting men safely and swiftly to their overseas destinations, the U.S.S. Admiral W. S. Benson, pictured above, was launched recently at the Bethlehem-Alameda Shipyard, Alameda, California. She is one of our new fleet of large troop transports, the first ship of her size to be launched on the Pacific Coast and will be converted to fast merchant service in the post war period.

No one will deny the right of such a ship to the finest equipment obtainable and we may be sure that the U. S. Maritime Commission has seen to it that these new troop transports have been built and

equipped with very special consideration for the vital duty they must perform.

The most important asset of a ship is her mobility, the power to move at will. Boilers are the source of this power and the Admiral Benson, like her sister ships, is powered with Combustion Engineering high-pressure, high-temperature boilers, designed for exceptionally high fuel burning efficiency.

C-E Boilers, built to the same high standards as those aboard our troop ships and many hundreds of other Maritime Commission and Naval vessels, will supply your future steam needs on land or sea, dependably and economically.

A776

## COMBUSTION ENGINEERING

200 MADISON AVENUE

NEW YORK 16, N. Y.



# THANKS, AMERICA..



*Betsy's on the Beam!*

... Yes, precision on the production front means precision ... and lives ... on the fighting fronts ... on sandy shores and deep in the jungles ... high in the cold air over Bremen and Berlin ... on bucking sub-chasers far out on the Atlantic.

Today ... in plants all over the country ... Electric Eye Inspection Equipment is insuring this accuracy and precision in the production of equipment and munitions ... carefully checking and measuring each piece ... accepting only those units which measure up to the highest standards.

It is gaging in micro-seconds to tolerances of plus or minus .0001 ... and doing it automatically. On some jobs it is making as many as eight simultaneous dimensional inspections at the rate of  $2\frac{1}{2}$  pieces per second.

And tomorrow, Electric Eye Precision Inspection Equipment will speed production for the postwar world.

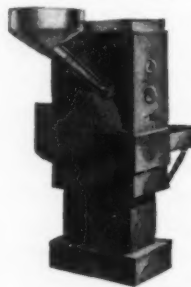
All our tomorrows depend on our todays. Now is the time to plan for your peacetime inspection needs while keeping Betsy on the beam for the duration.

## AUTOMATIC *Precision* INSPECTION

for Size—Weight—Thickness—Contour—Finish—Flow  
—Color—Speed—Light—Strength—Height—Depth.

# Electric Eye EQUIPMENT COMPANY

6 W. FAIRCHILD STREET  
DANVILLE, ILLINOIS



so-called contract of Dec. 18, 1944. We have filed a lawsuit in the Federal Court to have this order declared illegal and void. This action in no way affects the wage rate of any employee. It does mean, however, that the maintenance membership, check-off, and arbitration provisions will not be made effective.

The company further declared that its representative will "take up any grievance you may have in the union where you represent a majority of the employees, but he will not recognize your committee in either the mail order house or retail store." This leaves three units, employing perhaps 450 of Ward's approximately 6,000 employees, where the union is still free to function.

It also leaves the union's Chicago local up the financial creek. The union's monthly checkoff income was between \$2,000 and \$3,000 during its contract year. And unless new pressures are directed against the company, this lump sum payment will no longer be forthcoming. A good many employees are reported voluntarily paying their \$1 a month dues, but not enough of them are doing so to meet the local union's budget. The parent union will keep the local going until its status is clarified.

• **The Strategy**—Next step in the union's strategy doubtless will be to ask NWLB whether or not the board now considers it necessary and proper for the union to undertake the "useless" chore of appearing before NLRB to determine the union's status. Unless NWLB takes prompt steps to enforce its order upon Ward, the failure to make its ruling stick would, in labor circles, be interpreted as abdication. After which, further strategy is indicated by Wolchok's comment on the no-strike pledge.

Meanwhile, NWLB is fighting Ward lawsuits all over the lot. The Chicago action is the fourth of its kind (page 95), and the board lumps it with the similar suit filed by U. S. Gypsum Co., of which company Ward's chairman of the board, Sewell Avery, is president.

• **A Delaying Action**—NWLB lawyers consider Ward litigation as purely delaying action. They point out that the company uniformly goes to court asking a declaratory judgment holding that the board's action is illegal, and pleading for a permanent injunction against NWLB's enforcing the maintenance-of-membership clause.

These same NWLB officials impute to Ward a desire to delay final court judgment since a temporary injunction, which would expedite court action, is never requested. They credit Ward with a scheme calculated to stay the



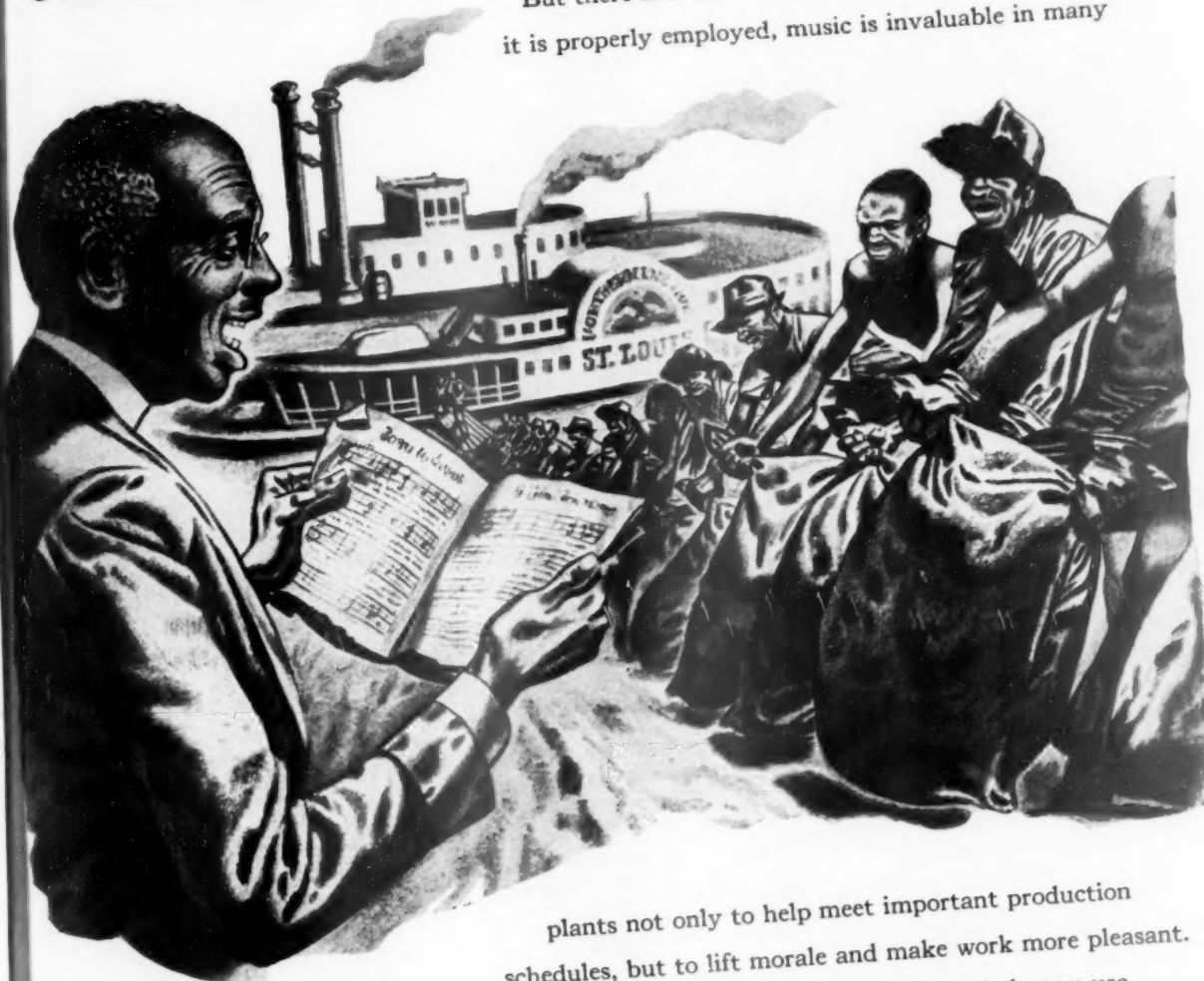
Not many years ago, it was the custom to hire negro preachers to lead the singing of gangs loading river boats. This is a classic example of the value of music in keeping production rolling smoothly.

However, music is not a cure-all. The wrong kind of music may even slow down production. And in some jobs,

any kind of music is a distraction rather than an aid.

But there is a wealth of evidence to prove that when it is properly employed, music is invaluable in many

invisible,  
but invaluable...



plants not only to help meet important production schedules, but to lift morale and make work more pleasant.

Stromberg-Carlson engineers can draw on fifty years of experience to help you use sound systems effectively. They can also show you how to use sound systems to locate key men

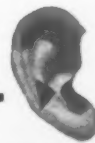
in a flash—out of thousands of other men, and in plants covering acres of ground.

For complete details, call on us, or write for Booklet No. 47. Sound Equipment Division of the Stromberg-Carlson Company, 100 Carlson Road, Rochester 3, New York.

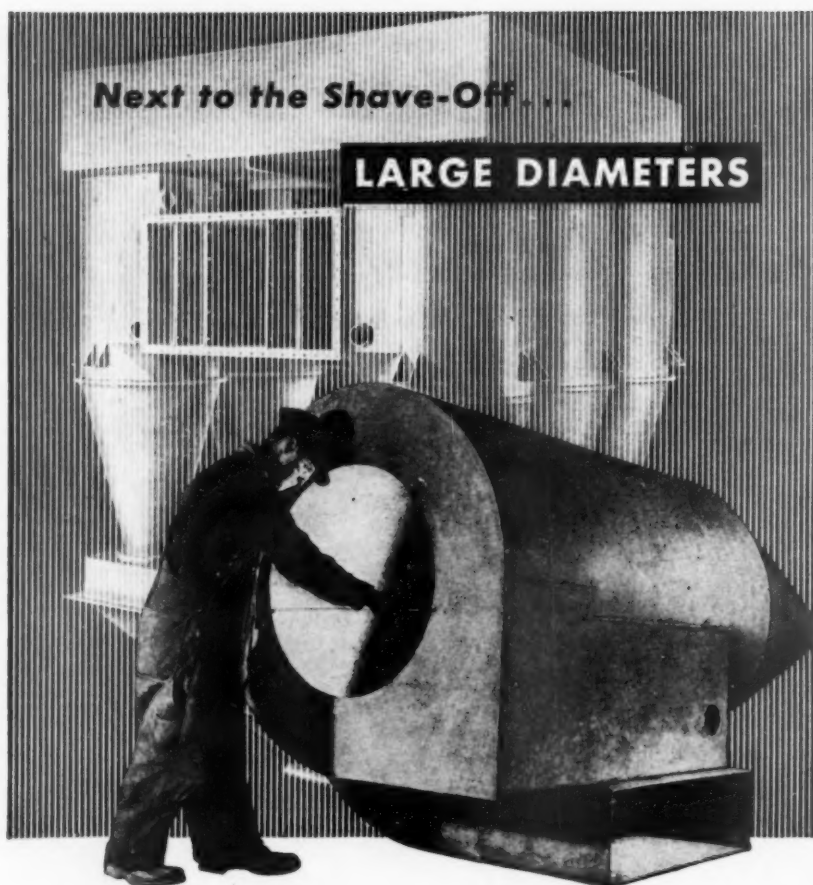
**STROMBERG-CARLSON**



STRAIGHT-LINE COMMUNICATION SAVES MANPOWER • SPEEDS THE WORK TO VICTORY







## No. 2 Reason for Buell's High Efficiency, Low Maintenance, Long Life

Because of Buell's exclusive feature—the patented van Tongeren "shave-off"—the cyclones in Buell Dust Recovery Systems do not have to be made with small diameters in order to achieve high recovery efficiency. \*On the contrary, diameters of Buell cyclones can be in excess of four feet without loss in efficiency.

These large diameters make possible operation with low centrifugal force and consequent reduction in abrasive wear; and permit construction of extra-thick steel, with large dust outlets, that makes clogging virtually impossible.

All these are prime factors in the trouble-free operation, low maintenance cost, and high efficiency of Buell Dust Recovery Systems—as established from actual records of installations in service for three, four, five or more years.

*\*Engineers will find convincing proof of this in Buell's factual, 28-page book: "The van Tongeren System of Industrial Dust Recovery." To obtain a copy, simply write requesting Bulletin G-842.*

**BUELL ENGINEERING COMPANY, INC.**  
60 Wall Tower, New York 5, N. Y.  
Sales Representatives in Principal Cities

**buell**  
DUST RECOVERY  
SYSTEMS

BUELL FEATURES	RESULT IN	PRODUCE
SHAVE-OFF LARGE DIAMETERS EXTRA-THICK METAL LARGE OUTLETS INNER WELDS GROUND SMOOTH CORRECTLY DESIGNED HOPPERS SPLIT-DUCT MANIFOLDS	HIGH COLLECTION EFFICIENCY LESS FAN BLADE WEAR LOW DRAFT LOSS LOW POWER CONSUMPTION HIGH TEMPERATURE RESISTANCE UNLIMITED CAPACITY NO MOVING PARTS FREE DUST FLOW	GREATER RECOVERY LOW MAINTENANCE LOW OPERATING COST LONG LIFE NO CLOGGING

DESIGNED TO DO A JOB, NOT JUST TO MEET A "SPEC"

board's hand until the war is over and the NWLB is demobilized.

● **Seeks Clarification**—NWLB is anxious to fight the issue through the courts and get a judicial pronouncement on its power that would once and for all, clear up the question of how far and how hard it can go. It will, therefore, on its own initiative do nothing about the latest Wage Finance except handle the court case unless pressured into doing so further by the union.

It is agreed, however, that a considerable trouble and expense, and the cost of some measure of a will, Montgomery Ward has made a precedent in national labor policy. If anything else, it has established the fact that, if an employer is unwilling to continue contractual relations with a union and if he can raise serious questions about that union's majority status, the NWLB will, on the Montgomery Ward case precedent, call upon the union to prove again its entitlement to recognition. And the company hopes it is only begun making precedents.

## Coal Mine Wins

Federal court decision on portal-to-portal pay indicates government is likely to stay out of coal business for duration.

The likelihood that the federal government would stay in the coal business until the end of hostilities was considerably strengthened last week by a decision which came from Judge A. Barksdale sitting in the U. S. Circuit Court in Lynchburg, Va. In a case involving the Jewell Ridge Coal Corp. and the United Mine Workers Union, Judge Barksdale ruled that payment to miners for underground travel time is contrary to the intent of the Fair Labor Standards (wage-hour) Act.

● **Backing for Operators**—This reinforced the stand of the Southern Coal Operators Assn. that the contract not in force at government behest between the industry and U.M.W. rests on fiction.

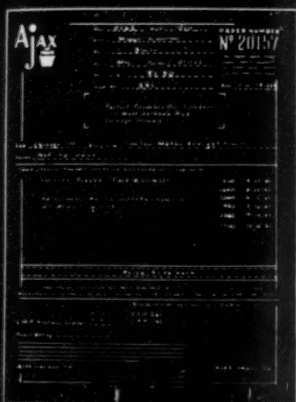
The Virginia decision fortifies the termination of the southern group to refuse voluntarily to become parties to a contract which establishes the travel time pay principle. Mine custodian Harold L. Ickes cannot therefore return the mines to private hands without again reopening the portal-to-portal dispute for at least part of the industry.

● **Union to Appeal**—In upholding the company's view that it was not liable for portal-to-portal wages, Judge Barksdale's decision is being appealed by the U.M.W.

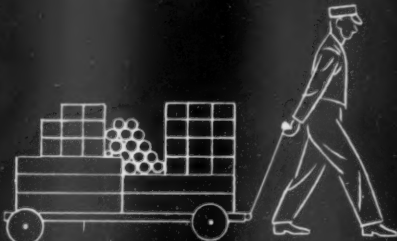


# The Easier, Surer Method of Handling

## Purchased Parts and Raw Material



*Materials ordered*



*Materials received*



*Materials inspected*

Now ready for industry is a sound and simple system for complete purchase order control, from the moment the order goes out until the last invoice is paid.

Under this system, worked out by Mimeograph duplication, purchasing, receiving and inspection routines are streamlined and combined in one paper work function.

Everyone, in each of the departments concerned, has at his fingertips information on *when* material is ordered, *what* is ordered, *what* is *received*, *what* is *accepted*, *what* is in the *store bins*.

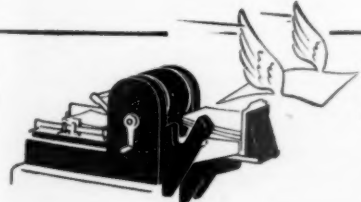
Delays and confusion resulting from lack of information are eliminated, and surer control all along the line is established

because all copies are identical. A. B. DICK COMPANY, Chicago.



### GET FREE FOLDER FOR FULL DETAILS

If you buy finished or semi-finished parts and raw material, if you have heavy production schedules to meet—and want to meet them, get full details on this practical and efficient new system. Just send the coupon below for our new free folder, "Complete and Accurate Control over Purchased Parts and Raw Material."



## Mimeograph duplicator

MIMEOGRAPH is the trade-mark of A. B. Dick Company, Chicago, registered in the U. S. Patent Office.

A. B. Dick Company, Dept. R-244  
720 W. Jackson Blvd., Chicago 6.  
Send me a free copy of the folder, "Complete and Accurate Control over Purchased Parts and Raw Material."

NAME .....  
COMPANY .....  
CITY ..... STATE .....

Wins  
decision  
indica  
to stay  
ation.  
e federal  
he coal  
ities was  
t week  
Judge A.  
S. C  
in a case  
al Corp.  
nion, Ju  
t to min  
is contr  
bor Stat  
This re  
ern Ce  
tract m  
t betw  
ests on  
es the  
group  
rties te  
ne tra  
custodi  
re retu  
withou  
ortal de  
ustry.  
ing the  
t liab  
Bark  
5, 194



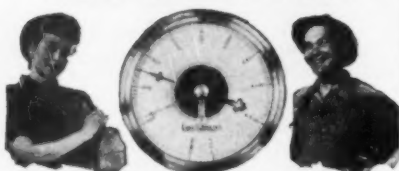
## Property Facts Will Help..



The **AMERICAN  
APPRAISAL**  
Company

CONSULTANTS IN PROPERTY ECONOMICS

### TODAY OR POST-WAR!



It Is Important to Measure Valuable  
Stored Liquids Accurately With—  
**LIQUIDOMETER Tank Gauges**

"THEY'RE ALWAYS DEPENDABLE"

100% automatic.

No pumps, valves, or auxiliary units needed to read them.

Models available for either remote or direct readings. Accuracy unaffected by specific gravity of tank liquid.

Approved by Underwriters' Laboratories for gauging hazardous liquids.

Write for complete details.

THE **LIQUIDOMETER** CORP.

38-12 SKILLMAN AVE., LONG ISLAND CITY, N.Y.



### LUMPERS ARE OUT

Since OPA's settlement of the two-month strike of East Coast fishermen over price ceilings (BW—Jan.22'44, p30), Boston fishermen have been working harder than ever. The reason: Their 125 organized "lumpers" (unloaders) walked out in protest against a pay cut. Thus when the first post-strike catches came into Boston last week, deserted pushcarts (above) greeted their arrival; the fishermen had to do their own unloading (right). Lumper wage rates are as complex as those of the fishermen who get 40% to 50% of the value of their catches. Out of this, they've been paying lumpers \$15 for the first 100,000 lb., plus \$1 for every additional 10,000 lb. unloaded. Their move to slash the base

rate to \$10, however, precipitated the new strike. Fishermen meanwhile are losing much of their leisure time ashore in doing the "lumping"



dale said that he found no indication in the wage-hour act that Congress intended "to make so radical a change" in the wage structure of the mining industry.

Judge Barksdale's ruling will be appealed immediately by the union.

### OPEN SHOP AT ISSUE

A highly important body of open-shop sentiment on the West Coast is contained in the Douglas Aircraft operations. Heart of that body is the vast plant at Santa Monica, its doors long closed to organized labor. This week Douglas Santa Monica workers voted 39.7% against being represented by a union. C.I.O.'s auto workers' union

was the choice of 34.3%; A.F.L.'s machinists the choice of 26%. The National Labor Relations Board will soon hold a runoff ballot between the C.I.O. and no union.

Important for the Coast's and the aircraft industry's labor pattern, the runoff will attract even wider interest because of the recently signed pact between A.F.L.'s machinists and C.I.O.'s auto workers. The pact provides that in situations where either one is established or clearly dominant, the other will not interfere. The question that the Douglas election will probably settle is, will this pact extend to active cooperation? In other words, will the machinists tell their followers to vote C.I.O.?



# THE WAR AND BUSINESS ABROAD

BUSINESS WEEK

FEBRUARY 5, 1944



Despite its possible value as a means of shortening the war, **look for no early statement of concrete peace aims by the United Nations.** Russian and Anglo-American plans for the political rehabilitation of liberated Europe are still poles apart, though both sides continue to make important concessions.

London and Washington bowed to Russia when they shifted their support of the Yugoslav underground from Mihailovitch to Marshal Josip Broz (Tito) and discontinued the training of a special group of Allied Military Government officials that had been preparing to undertake civilian rehabilitation in liberated Yugoslavia.

**Decision to withhold oil deliveries to Spain is a direct reprisal against Madrid** for refusing to curb such brazen anti-United Nations activities as interfering with orange shipments to England and for agreeing to repay civil war obligations to Hitler at this particular time with shipments of vitally important tungsten ore.

**If the new Anglo-American get-tough policy goes further, it will amount to an invitation to the Spanish people to find themselves a new government** that will be more cooperative with the Allies—and more acceptable to Moscow.

Specifically, the embargo also means that (1) Anglo-American chiefs of staff no longer fear a Hitler occupation of Spain, (2) London and Washington are ready to put teeth into blockade control for Spain-bound ships by forcing rigid cargo examination at Gibraltar (ships in the Argentina-Spain trade are known to have been smuggling large quantities of industrial diamonds and platinum to Nazi agents), and (3) Washington has taken one more step to convince Argentina (BW—Jan. 22'44,p104) that it must reject totalitarianism and its plans for an anti-U. S. bloc.

**Though no detailed United Nations peace aims are expected in the near future, individual nations quietly draw postwar economic patterns that reflect the boldness of wartime thinking.**

**For example, Prime Minister Mackenzie King may set the pace for revolutionary changes in international trade.**

His blunt statement at last week's reopening of the Canadian Parliament that "larger imports are needed to raise the standard of living" makes legislative watchdogs in Ottawa believe that **the Prime Minister is preparing for a general election in which he will ask the country to support a program of drastic U. S.-Canada tariff reductions.**

Mackenzie King's platform will reveal that a small group of manufacturers, having cut production costs on war equipment below those of competitors in the U. S., is convinced that they can compete in commercial lines on even terms after the war.

Look at the possibilities for rationalized trade in steel, for example. Canada cannot compete—and might therefore cut tariffs—on standard steel products. The loss to the Dominion's industry would be made up on lower-duty exports of specialty steels (aided by cheap power and plentiful alloying metals).

**Surprise development is the fact that one of the recognized Canadian straw-vote agencies recently took a test poll on tariff reduction, got a substantial affirmative majority, but, for some undisclosed reason, suppressed the outcome.**

Manufacturers, informally exploring long-term trade possibilities in the Far East, have discovered that **Chungking officials are busily engaged in reducing to a series of five-year-plans some of the elaborate estimates of China's industrial needs made nearly 20 years ago by Sun Yat-sen.**

To build 100,000 miles of railroad and double-track some existing lines—both considered essential by most Chinese economists if their country is to become an



# THE WAR AND BUSINESS ABROAD (Continued)

**BUSINESS WEEK**

**FEBRUARY 5, 1944**

industrial nation—China will need 20,000,000 tons of steel, 25,000 locomotives, at least 300,000 freight cars, and no less than 20,000 passenger cars.

To construct 1,000,000 miles of highway will call for another 2,000,000 tons of steel.

Since China lacks adequate supplies of iron ore, no more than 2,000,000 tons of steel a year are likely to be produced locally in the near future.

But to supply the country with a network of repair shops and a backbone of light industries, China will need at least 90,000 power-driven machine tools in the first five years of reconstruction.

**Catch will come when Chungking seeks to pay for goods by sending cheap textiles, pottery, and novelty exports to the U. S. Solution under discussion now is the allocation to China of import quotas formerly held by Japan.**

**Look for a new government in Italy as soon as Rome falls.**

The Badoglio government, from the first, was planned only as a stopgap arrangement during the initial invasion. **Badoglio is expected to live up to his pledge to step out voluntarily**, but the King is reluctant to abdicate. However, the granting of more freedom of action—and encouragement to Sforza and to the six parties in Italy—inevitably means finis for the King.

In spite of Soviet pressure for abolition of the monarchy, the U. S. will back the establishment of a regency, probably centering around Victor Emmanuel's grandson rather than the Crown Prince. Washington believes that **a complete shift to a republic might have explosive consequences** now and make it difficult to control the country during the reorganization and rehabilitation period.

**Watch southern Italy for a further unfolding of allied plans in liberated areas.** On Feb. 10, the Allied Military Government will turn over to the Armistice Control Commission jurisdiction over Italy south of a line running from Salerno to Barletta. Sicily is included.

The commission is composed of representatives of Britain, Russia, the French National Committee, and the U. S. Under their guidance, local Italian officials will be given increasing responsibility. Civil affairs officers of the American and British armies attached to the commission are former AMG personnel, so **the change is solely of title, not policy.**

Despite the vigorous protests from friendly countries, especially the French committee, that they want no Anglo-American civil affairs advisers when their countries are liberated, **at least a skeleton staff will be sent to almost all countries until returning exiles, and the underground, prove that they can handle the situation.**

The universal need for immediate relief supplies and the widespread demand for financial aid will make it possible for the British and Americans—who mainly will provide both items—to insist on supervisors to see that neither is squandered or distributed unfairly.

**Sole exile government with a completely organized civil affairs setup ready to function along lines comparable to AMG is the Netherlands.**

Planned with the full backing of Queen Wilhelmina and rigidly trained for more than a year, the 200 members of Holland's Military Civil Affairs Administration are ready to land in their homeland with the first or second wave of liberation troops.

Czechoslovak officials are drawing up plans for the civil administration of their country when it is liberated, **but are fitting them into the Russian pattern of advance**, for they expect to reoccupy their country from the east.



# Minerals Flowing

Axis powers monopolized Brazil's mineral riches until the war. Now the Allies are getting them and pushing development.

SAO PAULO—Not until after Pearl Harbor did the United States endeavor energetically to exploit Brazil's wealth of strategic minerals northward exceeds many times the quantities which until 1942 went mainly to Germany and Japan.

**World Rank**—With the war Brazil has resumed top rank as a world supplier of quartz crystals, tantalite, and mica.

Mineral production last year was at an all-time high. Exports of quartz crystals, indispensable for the manufacture of oscillators in radio apparatus, approached \$9,000,000, compared with prewar exports of \$800,000. Britain and the United States divide current exports equally; before the war, the Axis took 70% of Brazilian output.

**Export Crystals Graded**—Quartz deposits in Goyaz, Bahia, and Minas Geraes states (the last having produced a world-beating five-ton block in 1939) are considered the best in the world, and the government has initiated measures for establishing domestic quartz-cutting and oscillator factories. At present, crystals for export are graded by a special U. S. Army Signal Corps laboratory in Rio de Janeiro, set up nearly a year ago.

While withholding data on actual tantalite output, Brazil boasts a 140% rise in production last year, and expects to double that in 1944. Some 400 "mines"—isolated diggings—are scattered across the thin-grassed granite-cleft northeastern states of Paraiba and Rio Grande do Norte. In the few small towns in those areas, U. S. and Brazilian government workers weigh and buy the precious metal, essential for alloys and filaments, before air-expressing it to U. S. and British war plants. Simple mining machinery is gradually being introduced to speed production.

**U. S. Gets Surplus**—Mica, found in Goyaz and Minas Geraes states, reached a production value of \$700,000 in 1940, when more than half of the output went to Japan. Now, with production substantially increased, the U. S. has contracted to buy all of Brazil's exportable surplus, under a contract running to September, 1944 (BW—Oct. 30 '43, p. 76).

Exports of industrial diamonds are now running at the rate of \$8,000,000 a year, compared with a 1934-36 average of only \$18,000. Here again shipments are divided between Britain and the

U. S., and agents of these countries are helping to stimulate production in collaboration with Brazilian experts.

**Extensive Iron Ore**—William D. Johnston, Jr., geologist with the U. S. Purchasing Commission, recently praised the vast iron and manganese deposits found north of Rio. Of the world's discovered iron deposits, Brazil can claim ownership of 22%—15,000,000,000 tons in Minas Geraes state alone, of which 5,000,000,000 tons are of 50% to 60% iron content.

Brazil's manganese deposit in Matto Grosso is the largest in the Western Hemisphere—estimated at 20,000,000 tons of high-grade ore—and Minas Geraes claims another 6,500,000 tons. The bulk of Brazil's current output of 450,000 tons a year is going to the U. S.

**Nickel Under Scrutiny**—In addition, Brazil has vast bauxite and nickel deposits. The American Smelting & Refining Co. of New York (in partnership with the government of Brazil) is surveying the nickel site (a 2,000,000-ton bed has been located in an area expected to produce 10,000,000 tons) preparatory to exploitation.

Other strategic minerals found in quantity, and now about to be exploited on a larger scale, include beryllium, tungsten, zirconium, and rutile.

Although many of the principal minerals are being reserved for government exploitation, the potentialities of the

country, much of it still unexplored by geologists, are leading the government to reconsideration of the mining laws with a view to encouraging participation of foreign capital on a larger and more favorable basis. At the moment, however, such alterations remain in the discussion stage.

## NEW SOVIET FURNACE

Beside the swift waters of the Ural River stands Magnitogorsk, backbone of the Soviet munitions industry. Since the loss of Ukrainian mills to the Germans, Magnitogorsk, Chelyabinsk, and Tagil—steel cities of the Urals—have rolled the major part of Russia's steel. Magnitogorsk is the biggest, oldest, and proudest.

At the turn of the year, Magnitogorsk's pride was in its second war-built blast furnace, "bigger than any in Europe." In Moscow, Sverdlovsk, Krasnoyarsk, and Irkutsk, special factory committees speeded delivery of components needed to complete the furnace in 1943. It was blown in on Dec. 25.

A year earlier, Magnitogorsk proudly announced completion of its fifth (and first war-built) furnace. The sixth, finished in seven months and built entirely from Soviet materials, has better than 1,200-ton daily capacity, will be followed by others needed for rehabilitating devastated industrial areas.

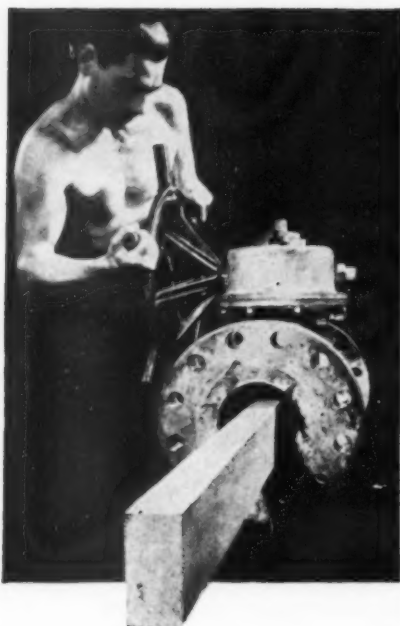


## ORANGE INCIDENT

While sailors cleaned up a mess of broken crates and squashed oranges caused by the explosion of a saboteur-planted bomb in a ship bound from Spain to England, London sent a terse demand to Madrid that it abandon its

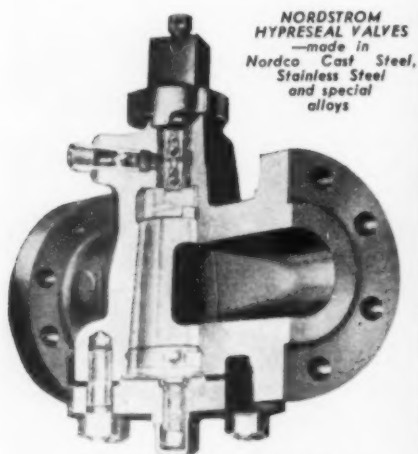
pro-Axis activities—then with Washington slapped a retaliatory embargo on all oil exports to Spain (page 111). Salvage-minded representatives of the efficient British food ministry were waiting when the ship docked with crews of workers to rush the damaged oranges to nearby marmalade factories.





### It takes a Nordstrom to perform this shear test

Positive opening, positive closing and always a perfect seal. Simple to say; always demanded; but it takes a Nordstrom to do it. As proof, this amazing shear test was made by inserting a 2"x6" Douglas Fir timber into an open valve and cutting it off clean, by simply turning the plug. Nordstrom's lubricated plug construction, with patented "Sealdport" lubrication, affords no seating space where sand, sludge or other foreign material might lodge and prevent closure. It's clog-proof.



BULLETINS UPON REQUEST

**MERCO NORDSTROM VALVE CO.**

A Subsidiary of Pittsburgh Equitable Meter Co.

Main Offices—Pittsburgh, B, Penna.

Branches in all principal cities.

## NORDSTROM LUBRICATED PLUG VALVES

**KEEP UPKEEP DOWN**

# CANADA

## Termination Plan

Canada's new formula is quite similar to pattern set by U. S. An over-all procedure will supplement present clauses.

OTTAWA—Canada is putting into operation a war contract termination formula, supplementing existing termination clauses, which follows closely the pattern set by the Baruch formula announced in the United States last month (BW—Jan. 15'44, p15) and now being applied by Washington contracting agencies.

• **Criticism Is Asked**—Officials of Minister C. D. Howe's Munitions & Supply Dept., top Canadian war production agency, have drafted the termination plan and submitted it to key industrialists for criticism.

Although minor revisions may be made later, the formula—not yet officially announced—will be tried on contracts terminated before the revisions are made.

• **An Over-All Code**—Most Canadian contracts carry a termination clause covering many of the more difficult settle-

ment problems. The new formula picks up the terms of this settlement clause and adds others to provide an over-all code of procedure.

Under the new formula, when contracts are terminated before completion, all finished work will be paid for in full according to contract terms. For unfinished work, the contractor will get back all his costs, including those for capital installations, depreciation, the extent allowed for business income tax deductions, overhead, materials, and labor. The contractor will also be reimbursed (1) for the cost of inventories, audits, and reports required by the Munitions & Supply Dept. when termination is ordered; (2) for charges for which he becomes liable in the cancellation of power and other services; and (3) for payroll payments under the seven-day separation notice edict of Selective Service.

On top of this, the manufacturer will get a reasonable profit on unfinished work. Until now the profit to be allowed had not been determined, but indications are that it will be as generous as that provided for in the U. S. formula.

He will be allowed compensation for hardship sustained through termination but will get no compensation for loss of profit on the uncompleted part.

He will not be allowed to recover expenditure on output on which delivery is in arrears through circumstances for which he is responsible.

Negotiated settlement outside the strict terms of the formula but not outside its prin-



## LITTLE BUT DEADLY

Britain's and Canada's newest weapon is a portable tank-killer that fires a 3-in. shell capable of piercing 4-in. armor. Unlike the American bazooka (BW—Sep. 25'43, p20), this gun does not em-

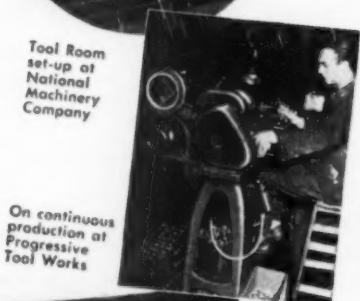
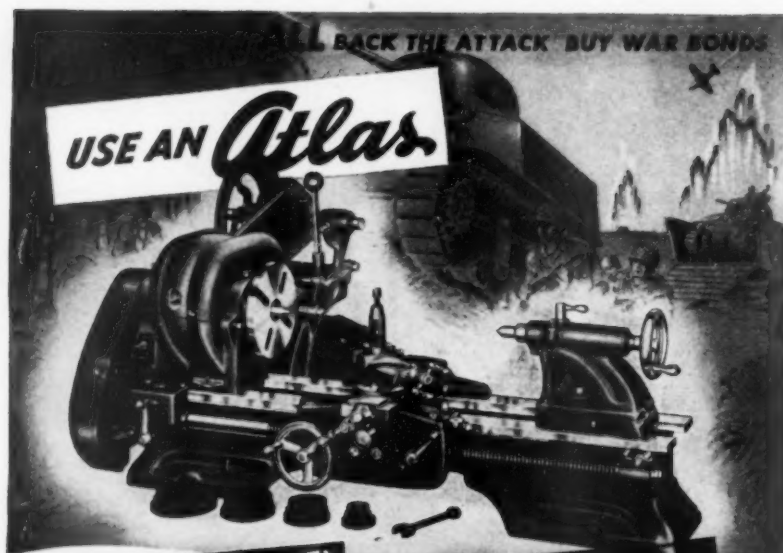
ploy the rocket principle. The secret of its terrific punch is in a special firing mechanism and an odd-shaped bomb fired from a stubby open barrel (above). Most of its details are yet under wraps although the gun is already in service on the Italian fronts.



***"Boys, let's put our heads together and see how much paper and paper board we can save!"***

**T**HAT'S the spirit. That's what we've all got to do to lick this problem of getting enough paper and paper board for Army and war-production use.





**10" LATHE**  
SPECIFICATIONS  
Swing Over Bed 10 1/4"  
Swing Over Carriage 6 5/8"  
16 Spindle Speeds 28 to 2073 RPM  
Thread Cutting Range 4 to 96 per inch  
Four Bed Lengths 18" to 36" centers

## MATCH the MACHINE TO THE JOB

One of the biggest lessons industry has learned from the pressure of war demands is that good small machines are just as capable for small parts production as large machines . . . and far less costly to buy and operate.

Modern, compact Atlas machine tools boost production and cut costs in thousands of plants by taking over small parts production . . . so capacities of the larger machines will not be wasted.

Atlas lathes, for example, are handling screw machine work with maximum precision and speed under the toughest operating conditions. And a whole battery of these machines can be installed at the cost of a single larger tool.

Use an Atlas wherever possible in your plant to "match the machine to the job" . . . for greater production now and greater profit after the war. Send for complete details and the name of our nearest distributor.

**ATLAS PRESS CO.**

285 N. PITCHER ST.  
KALAMAZOO 130, MICHIGAN



## Atlas 4 TOOL TEAM for Small-Parts Machining



ciples is permissible. Where a contractor refuses to accept terms offered by the Munitions & Supply Dept., the dispute may be referred to the Exchequer Court. The contractor is not permitted to take legal action for recovery of damages or loss of profit as a result of termination.

Prime contractors are to make their own termination settlements with their subcontractors. If mutually satisfactory settlements are not made by negotiation, the provisions of the formula are to govern. In any case the prime contractor is held responsible for protecting the government's interests.

Where a contractor needs money urgently he will receive interim payments on the settlement pending completion of inventories and audits. He must share such payments with his subcontractors.

If the prime contractor's suppliers will accept return of unused materials and other supplies, he is required to return them, and in the case of imported goods, he will receive a refund of duty. He is to dispose of goods which are not returnable and will recover losses on such sales up to set limits. Unsuitable goods are to be turned over to the Crown Assets Allocation Committee (page 28). Government-owned machine tools are to be delivered to Citadel Merchandising Co.

## Looking to Peace

Mackenzie King watches political drift closely as he offers fat legislative program for postwar security.

OTTAWA—The Prime Minister has a weather eye on the political drift in the Dominion. Through Gov. Gen. Lord Athlone, who delivered the speech from the throne to Parliament last week, Mackenzie King told Canadians that winning the war is their first concern and then proceeded to point one of the fattest legislative programs in Canada's parliamentary history exclusively toward preparations for peace.

● **Grading the Curves**—None of the United Nations has yet come within shooting distance of the mark King has set for the 1944 Parliament in reconversion and reconstruction measures. These provide for grading all the curves on the road back and take specific notice of war-end and postwar problems facing every element of the population.

Politically wise Canadians, knowing their wily Prime Minister, figure the program is designed to return him to office in a general election this year.

● **Taxation Relief**—Aids to business top the list of proposed enactments: (1) taxation relief and (2) financial assistance through credit advances for fixed and working capital (BW—Dec. 11 '43, p. 46); (3) guarantee of export credits; (4) expansion of trade commissioner service



contractor by the Ministry of Reconstruction Dept. to guide traffic on the road back.

Tax concessions are not likely to be large while the war continues, but business disinterest in large foreign orders for reconstruction abroad—due to currently narrow profit margins—has forced Ottawa to recognize the problem.

Capital assistance to industry is aimed not only at aiding reconversion but also in developing new enterprise as well, and will be handled through an Industrial Development Bank—like the U.S. Reconstruction Finance Corp.—set up as a subsidiary of the Bank of Canada.

**A Counterirritant**—Export credit will be provided separately, mainly as a standby counterirritant in case British-American-Canadian negotiations for coordination of export trade fall through and one or more competing nations turn to trade subsidy devices.

Last fall Canada expected Ottawa to plump for family allowances for dependent children as a counterbalance to a wage-ceiling break recommended by Chairman C. P. McTague of the National War Labor Board (BW—Sep.25 '43,p60). When the Prime Minister decided not to abandon wage ceilings (BW—Dec.11'43,p44), the public guessed he was saving dependency allowances for later. They were right.

**Security Measures**—Family allowances are among the several social welfare measures promised in Lord Athlone's speech. They are designed for everyone, but low-income (nonincome-tax-paying) brackets would benefit most because allowances would cancel income tax deductions for children. Large Quebec families may collect \$800 to \$1,000 a year. Labor would rather get the bounty in straight wage boosts.

Other security measures include: (1) nation-wide health insurance under federal-provincial arrangements; (2) larger contributory old age pensions on a national scale; (3) a national housing program; and (4) creation of a Dept. of Social Welfare.

Canadian farmers are again promised a postwar floor under farm prices.

**None Overlooked**—More work will be done on detailing Canada's demobilization and rehabilitation program (BW—Jan.1'44,p50). A government Dept. of Veterans' Affairs would be set up.

Elements of the population not specifically mentioned are blanketed under the health insurance, old age pension, family allowance, housing, and employment guarantee measures. Mackenzie King hasn't overlooked anyone in a postwar program designed to give Canadians a new deal in a better world and incidentally to divert voter sentiment away from Cooperative Commonwealth Federation's policy of state socialism.

## ADVERTISERS IN THIS ISSUE

Business Week—February 5, 1944

ACHESON COLLOIDS CORP.....	88	HYATT BEARINGS DIVISION GENERAL MOTORS CORP.....	109
Agency—Witte & Burden		Agency—Campbell-Ewald Co., Inc., Eastern Div.	
ACME PATTERN & TOOL CO.....	71	INGERSOLL RAND COMPANY.....	83
Agency—Keeler & Stiles Co.		INSURANCE AUDIT & INSPECTION CO., 74	
ALUMINUM ORE COMPANY.....	98	Agency—Sldener & Van Riper, Inc.	
Agency—Fuller & Smith & Ross Inc.		JOHNSON & HIGGINS.....	25
AMERICAN AIR FILTER COMPANY.....	41	Agency—Doremus & Co.	
Agency—Parson & Huff		JONES & LAMSON MACHINE CO.....	67
AMERICAN APPRAISAL CO.....	108	Agency—Van Sant, Dugdale & Co., Inc.	
Agency—Klau-Van Pietersom-Dunlap Assoc., Inc.		JOYCE MACHINE CO.....	79
AMERICAN CREDIT INDEMNITY CO.....	68	Agency—Seberhagen, Inc.	
Agency—Van Sant, Dugdale & Co.		THE KAYDON ENGINEERING CORP.....	24
AMERICAN PHOTOCOPY EQUIPMENT CO.....	82	Agency—Klau-Van Pietersom-Dunlap Assoc., Inc.	
Agency—Klau-Van Pietersom-Dunlap Assoc., Inc.		GEORGE LA MONTE & SON.....	3
THE AMERICAN ROLLING MILL CO.....	34	Agency—Samuel C. Croot Co., Inc.	
Agency—N. W. Ayer & Son, Inc.		G. B. LEWIS CO.....	54
ART METAL CONSTRUCTION CO.....	70	Agency—Bert S. Gittins, Advertising	
Agency—McCann-Erickson, Inc.		LIBERTY MOTORS & ENGR. CORP.....	57
ASSOCIATION OF PREFORMED WIRE ROPE MANUFACTURERS.....	94	Agency—Van Sant, Dugdale & Co., Inc.	
Agency—Belcher, Ellis-Younggreen & Finn, Inc.		THE LIQUIDMETER CORP.....	108
ATLAS PRESS CO.....	116	Agency—Lucerna Co., Inc.	
Agency—Staske & Schoonmaker Co.		MANNING, MAXWELL & MOORE, INC., 26	
BAKER INDUSTRIAL TRUCK DIVISION OF THE BAKER RAULANG CO.....	53	Agency—Briggs & Varley, Inc.	
Agency—G. M. Barford Co.		MARMON-HERRINGTON CO.....	29
BALDWIN LOCOMOTIVE WORKS.....	37	Agency—The Caldwell-Baker Co.	
Agency—Ketchum, MacLeod & Groves, Inc.		MARSH STENCIL MACHINE CO.....	82
BEMIS BRO. BAG CO.....	55	Agency—Pado	
Agency—Gardner Advertising Co.		MARYLAND CASUALTY CO.....	23
BIRDSBORO STEEL FOUNDRY & MACHINE CO.....	77	Agency—J. M. Mathes, Inc.	
Agency—Beaumont, Heller & Spelling, Inc.		McBEE CO.....	30
BLACK & DECKER ELECTRIC CO.....	85	Agency—L. E. McDivine & Co., Inc.	
Agency—The Bayless-Kerr Co.		MERCO NORDSTROM VALVE CO.....	114
BLACKHAWK MFG. CO.....	28	Agency—The McCarty Co.	
Agency—Klau-Van Pietersom-Dunlap Assoc., Inc.		THE MICHAELS ART BRONZE CO., INC. 51	
BOEING AIRPLANE CO.....	31	Agency—Jaap-Orr Co.	
Agency—N. W. Ayer & Son, Inc.		MONSANTO CHEMICAL CO..... 4th Cover	
BOICE CRANE CO.....	118	Agency—Gardner Advertising Co.	
Agency—Wendt Adv. Agency		MONTGOMERY ELEVATOR CO.....	119
BREEZE CORPORATIONS, INC.....	95	Agency—L. W. Ramsey Co.	
Agency—Adams, Burke Dowling, Inc.		NEKOOSA-EDWARDS PAPER CO.....	8
L. L. BROWN PAPER CO.....	32	Agency—The Cramer-Krasselt Co.	
Agency—Cowan & Denger, Inc.		NEW YORK CENTRAL SYSTEMS.....	38
BUELL ENGINEERING CO. INC.....	106	Agency—Foots, Cone & Belding	
Agency—Tracy, Kent & Co., Inc.		NORTHERN PACIFIC RAILWAY CO.....	69
THE BULLARD CO.....	90	Agency—Batten, Barton, Durstine & Osborn, Inc.	
Agency—Snow & Cahalin, Inc.		NORTON CO.....	47
BURROUGHS ADDING MACHINE CO.....	94	Agency—John W. Odlin Co., Inc.	
Agency—Campbell-Ewald Co., Inc.		OREGON JOURNAL.....	56
CLAYTON MFG. CO.....	52	Agency—Short & Baum, Advertising	
Agency—West-Marquis, Inc.		PENN ELECTRIC SWITCH CO.....	6
COMBUSTION ENGINEERING CO., INC. 103		Agency—Lampert, Fox & Co.	
Agency—G. M. Barford Co.		PLYMOUTH CORDAGE CO.....	75
CONTAINER CORP. OF AMERICA.....	27	Agency—Fuller & Smith & Ross Inc.	
Agency—N. W. Ayer & Son, Inc.		PULLMAN-STANDARD CAR MANUFACTURING CO.....	35
RALPH C. COXHEAD CORP.....	58	Agency—Charles Daniel Frey Co.	
Agency—O. S. Tyson & Co., Inc.		RELANCE ELECTRIC & ENGINEERING CO.....	80
CRANE CO.....	99	Agency—Meldrum & Fenwirth, Inc.	
Agency—The Buchen Co.		REVERE COPPER & BRASS, INC.....	110
CUTLER-HAMMER, INC.....	12	Agency—St. Georges & Keres, Inc.	
Agency—Kirkpatrik-Drew		REYNOLDS METALS CO.....	60, 61
A. B. DICK CO.....	107	Agency—Buchanan & Co., Inc.	
Agency—L. C. Burnet Co., Inc.		SAN JOSE CHAMBER OF COMMERCE.....	36
DIEBOLD, INC.....	45	Agency—Wank and Wank	
Agency—Gweney & James Co.		SHEFFIELD CORP.....	49
DOUGLAS FIR PLYWOOD ASSOCIATION.....	100	Agency—Witte & Burden	
Agency—The Condon Co., Inc.		SKILSAW, INC.....	46
EASTMAN KODAK CO.....	59	Agency—Earle Ludgin Co.	
Agency—J. Walter Thompson Co.		THE W. W. SLY MFG. CO.....	44
F. EBERSTADT & CO.....	74	Agency—The Bayless-Kerr Co.	
Agency—Doremus & Co.		L. C. SMITH & CORONA TYPEWRITERS, INC.....	91
EDISON STORAGE BATTERY DIVISION		Agency—Newell-Emmett Co.	
THOMAS A. EDISON, INC.....	2	THE SPERRY CORP.....	97
EITEL-MCCULLOUGH, INC.....	81	Agency—Young & Rubicam, Inc.	
Agency—L. C. Cole, Adv.		SPRIESCH TOOL & MANUFACTURING CO., INC.....	78
ELECTRIC EYE EQUIPMENT CO.....	104	Agency—Tyler Kay Co., Inc.	
Agency—Almon Brooks Wilder, Inc.		STROMBERG CARLSON COMPANY.....	105
FRANKFORD DISTILLERIES, INC., 3rd Cover		Agency—McCann-Erickson, Inc.	
Agency—Young & Rubicam, Inc.		THE STUDEBAKER CORP.....	62
GAYLORD CONTAINER CORPORATION.....	48	Agency—Roche, Williams & Cunningham, Inc.	
Agency—Oakleigh R. French & Assoc.		TAFT-PEIRCE MFG. CO.....	102
GENERAL BOX CO.....	72	Agency—Rutherford-Abbott	
Agency—The Buchen Co.		TAYLOR INSTRUMENT COS.....	101
GENERAL ELECTRIC CO.....	14	Agency—Batten, Barton, Durstine & Osborn, Inc.	
Agency—Leighton & Nelson		THE TWENTIETH CENTURY FUND.....	118
THE B. F. GOODRICH CO.....	1	Agency—Denhard, Pfeiffer & Wells	
Agency—The Griswold-Ehlerman Co.		TWIN DISC CLUTCH CO.....	50
GRAHAM TRANSMISSIONS, INC.....	8	Agency—Spencer W. Curtis, Inc.	
Agency—Bert S. Gittins, Adv.		UNION METAL MFG. CO.....	42
GRAYBAR ELECTRIC CO.....	86	Agency—The Griswold-Ehlerman Co.	
GRINNELL CO., INC.....	76	WAR ADVISORY COUNCIL.....	115
Agency—Horton-Noyes Co.		Agency—Werner & Swasey Co., Inc., 2nd Cover	
GULF OIL CORP.....	11	Agency—The Griswold-Ehlerman Co.	
Agency—Young & Rubicam, Inc.		WEBSTER ELECTRIC CO.....	87
HALLICRAFTERS, INC.....	33	Agency—J. B. Hamilton Advertising Agency, Inc.	
Agency—Burton Bryne, Inc.		L. J. WING MFG. CO.....	89
HAMMERMILL PAPER CO.....	39	Agency—Willard G. Myers Advertising Agency	
Agency—Batten, Barton, Durstine & Osborn, Inc.		YAK CORP.....	4
HARDWARE MUTUAL CASUALTY CO.....	96	Agency—J. M. Mathes, Inc.	
Agency—Roche, Williams & Cunningham, Inc.		YOUNGSTOWN SHEET & TUBE CO.....	43
JOSHUA HENDY IRON WORKS.....	73	Agency—The Griswold-Ehlerman Co.	
HUNTER ELECTRO-COPYIST, INC.....	54		
Agency—Barlow Advertising Agency, Inc.			



**A National Debt of  
\$300,000,000,000**

HOW DOES IT AFFECT BUSI-  
NESS IN POSTWAR AMERICA?

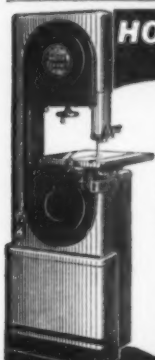
## STUART CHASE

*gives his own incisive analysis  
of the hotly debated question*

## WHERE'S THE MONEY COMING FROM?

Our economy is geared to a national output of goods and services of around \$150 billions. So long as it stays high, we can avoid a crash. How can we make sure of maintaining high employment and high production? How can we finance our debt, taxes, and an expanding economy? *Where's the money coming from?* Stuart Chase, in bold thinking and lucid writing, tells how he thinks we might make the national debt an asset . . . how we can keep private enterprise the heart of our business system . . . and use the powers of government to underwrite prosperity for all America. Send for your copy of this challenging book today.

At all booksellers or attach a dollar bill to this advertisement and mail to  
**THE TWENTIETH CENTURY FUND**  
330 W. 42nd St. New York 18



## HOW TO OBTAIN SHOP TOOLS

at the earliest possible  
moment and  
**PAY FOR THEM OUT OF  
PATRIOTIC SAVINGS  
IN WAR BONDS**

Own versatile, low-cost, sturdy  
**Boice-Crane**  
Band Saws - Saw Jointers  
Jig Saws - Belt Sanders  
Spindle Shapers  
Spindle Sanders  
Drill Presses - Lathes  
Thickness Planers

Write today for folder on the

**Boice-Crane** **PURCHASE  
PRIORITY  
PLAN**

a safe, convenient plan for forward-  
looking shop men and home craftsmen.

With manufacturers now engaged  
100% in war production, the pent-up  
demand for shop tools is tremendous.  
You can avoid prolonged waiting for  
your tools, or the necessity of buying  
something less satisfactory, by reserv-  
ing a preferred delivery position now.  
Use this convenient coupon for details.

**BOICE-CRANE CO.**  
978 Central Ave., Toledo, Ohio

Please send, without obligation or cost, details  
of the Boice-Crane Purchase Priority Plan, to-  
gether with a copy of your catalog on shop tools.

NAME \_\_\_\_\_  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_

# THE MARKETS

(FINANCE SECTION—PAGE 46)

While rail stocks did rise sharply in January, and the utility shares haven't done so badly, in neither of those groups has the trading volume been particularly large in 1944.

● **Interest Slumps**—Since early January, less and less interest in the industrial shares has been evidenced by investors and speculators. This is not at all an encouraging sign, since market action of industrial stocks listed on the New York Stock Exchange still represents the conventional basis for appraising the general direction of equity prices.

Probably the opening of the Fourth War Loan Drive has had something to do with the recent discouraging performance of the industrial shares. Nevertheless, many Wall Streeters frankly believe that other factors have been playing a more important part.

● **Potent Factors**—They attribute the recent trend (or lack of trend) more to investors' and speculators' caution because of the uncertainties of several potent market factors: the ultimate effect on corporation profits of the new tax legislation; the different viewpoints that the United Nations seem to have acquired of late concerning the postwar period; the potentialities, marketwise, of the impending invasion of Europe; and the new phase of operations in the South Pacific.

Some market followers have been further disturbed by the technical weakness of the market that is suggested to them by the definite inability, for about a month now, of the industrial price average to break out of the "supply" zone.

Also an unhealthy market sign, in this

group's opinion, has been the recent trend towards avoidance of the usual standard bellwether stocks and the purchase, instead, of shares in the very low price class, a condition well evidenced by the market performance Tuesday of this week when 25% of all volume was provided by ten shares with an average price under \$11.

● **Not to Be Ignored**—The fact that no real selling pressure has developed thus far, despite the increasing uncertainties, seems to some market prognosticators an element of basic strength not to be ignored in considering near-term moves, and they currently anticipate higher levels for the industrial price average this month.

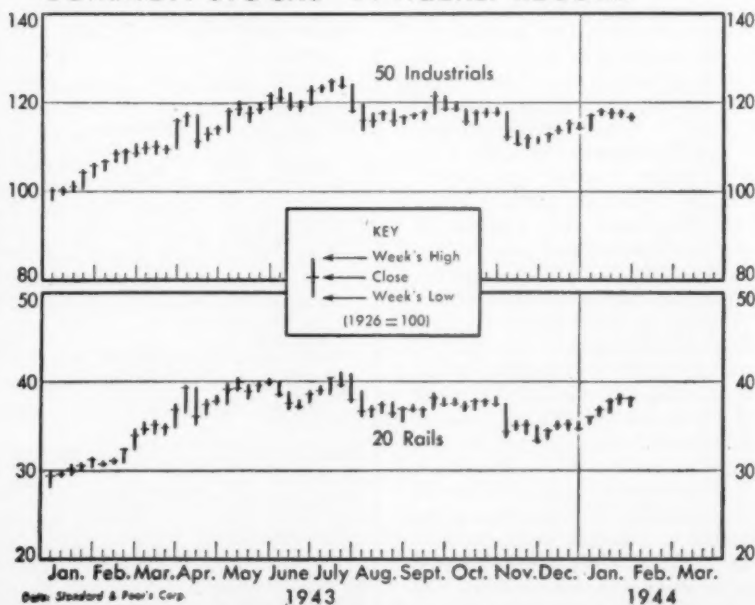
Others, however, are not so sanguine. They see that average still on the defensive. They say potentialities, marketwise, of so many big events in the balance are so tremendous that already they have had a sobering effect, and they expect lower prices before any real advance.

## Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
<b>Stocks</b>				
Industrial . . .	116.8	117.4	117.1	105.9
Railroad . . . .	38.2	38.1	36.0	31.3
Utility . . . . .	50.5	50.3	50.4	40.4
<b>Bonds</b>				
Industrial . . .	119.4	119.6	119.7	115.7
Railroad . . . .	105.1	104.6	102.8	91.8
Utility . . . . .	115.6	115.5	115.4	111.0
U. S. Govt. . .	112.0	112.1	112.1	109.6

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

## COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

1943

1944



# THE TRADING POST

## Postwar Problems Abroad

A letter from Richard V. Waller, assistant general manager of the Naval Ordnance Division of American Type Founders, offers the following comment:

I was interested in the Washington Bulletin item on page 7 of your January issue, entitled "AMG Recruits Needed."

Your Washington correspondent indicates what to those of us who have lived in Europe is so evident. That is to say, AMG will have to do the job of rehabilitation in friendly as well as enemy countries. He ends by stating "nor is there time now to do an adequate job of training new hands."

AMG has so many limitations that it is no wonder we have trouble recruiting the necessary personnel. This personnel must be of two types, (1) experienced executives either with former European or American experience; and (2) inexperienced people who must be trained entirely.

In the first group there are a few exceptional cases such as Lt. Gov. Poletti of New York, who, in addition to his unquestionable executive and administrative ability, has had the good fortune to go to school in Italy and speaks fluent Italian. He also, undoubtedly, has a personal fortune which permits him to accept a commission of Lt. Colonel, keep his family, pay his taxes, and handle his expenses abroad.

There are, however, in this country many American business men who have had a long and varied experience in the European countries. Most of these men arrived here with their families, some taking positions in the companies which they represented in Europe, others, who were in business for themselves, seeking, and in most cases finding, corresponding executive positions in this country. However, very few of these men with executive experience, linguistic ability, and knowledge of the countries where they lived, which would make them particularly apt for the higher grades in AMG, could accept such positions, as very few of them have personal fortunes which would permit them to go abroad for AMG.

If AMG really wants this type of man, it must be prepared to pay him a salary that will permit him to keep his family in the United States, and handle his cost of living and expenses abroad.

It may be possible to train a certain number of younger men for the subordinate positions abroad, but no one can hope to do a good job without an excellent knowledge of the country where he is stationed, its people, customs, and languages.

To ask men old enough to have such ability to accept the salaries paid to commissioned officers, is asking a few people to make sacrifices which, from patriotic motives, they might be perfectly willing to make, but which they do not feel they should extend to their families.

The point raised by Mr. Waller with respect to the military government of

liberated areas has a counterpart in the problem of United States postwar representation abroad.

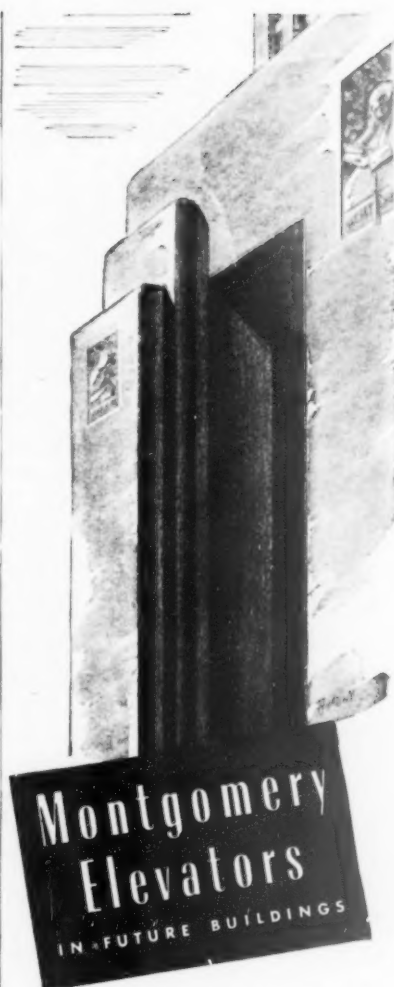
By now it is taken for granted that after the war our country will be in a new position with respect to most of the other nations. Whether or not we look forward with enthusiasm to our new status is beside the point. The fact is that in many quarters of the globe we shall face new responsibilities, new hazards, new opportunities, and, above all, more highly complicated problems in looking after American interests abroad than we ever imagined in the days before the war.

So far as I know, we are woefully short of the educated, experienced, and trained manpower that we shall need to staff the scores of international agencies that must be set up if we are to do the job that now is staked out for us. Already, in the Mediterranean basin and the Near East, we have had a foretaste of the thoroughness with which the Russian government goes into the economic, political, social, and other phases of any area in which it conceives Russian interests to be involved. We know that for generations the British have maintained a corps of civil servants who are competent specialists in international affairs. Our own efforts in that sphere never have been on the same scale. And I know of no well-organized effort now under way to strengthen our hand for the world-wide game of national interests that surely will follow the war.

Quite to the contrary, we have taken from the universities hundreds, maybe thousands, of young men who were majoring in those subjects that must provide the basis for such service and have hustled them into uniform to serve their country as fighting men. International economics, foreign history, world politics, trade routes, and the distribution of natural resources—these and kindred studies are the essential foundation for the highly specialized training that will be needed to produce men competent to deal with the new complex of world relationships on even terms with the other world powers.

Both Great Britain and Russia surely have thrown into their war effort as large a share of their human resources as we have. Yet I suspect that both of them will be in better position than we shall be to cope with postwar international affairs unless we begin pretty soon to assemble and train the young men who will be looking after our interests at the world's conference tables during the next generation.

W.C.



NEW BUILDINGS now being planned will utilize new materials and techniques. And where passenger and freight elevators are required, new problems will arise. For assistance in solving these problems you can depend on Montgomery. For nearly 50 years Montgomery Elevators have been giving dependable service in thousands of buildings throughout the country. Accurate records show that practically no major repairs have ever been required. Too, original cost of Montgomery Elevators is generally lower than that of other comparable makes. If you are planning a specific project, we invite your elevator problems.

**MONTGOMERY MANUFACTURES** a complete line of passenger and freight elevators, electric dumbwaiters and special equipment for vertical transportation.





# THE TREND

## A SECOND APPROACH TO FULL EMPLOYMENT

We have set full employment as the postwar goal—as the social test which our free enterprise economy must meet. The task is to expand the volume of business to give jobs to substantially all those who seek them. One thing that makes the task difficult is that output per man-hour increases faster than hours per worker decline. For the rest, how much business must expand to meet the test depends on the number of job-seekers.

- **The labor force is not static.** Before 1920, it grew with immigration; it has continued to grow with the population. But its size also changes with internal trends—towards longer schooling, earlier retirement, aging population, more women working. These trends are, in part, subject to control.

To put the case sharply, on certain extreme assumptions as to internal factors alone, we can conceive for a postwar time two years hence a maximum labor force of 63,000,000 and a minimum one of 51,000,000. A business volume that would mean "full employment" to the hilt on one assumption would leave 12,000,000 unemployed on the other. This example is reason enough for re-examining what we mean by "full employment" and what we might choose to do about achieving it by reducing the number of job-seekers.

In 1940, we had an average labor force of about 54.5 million persons aged 14 or over. By 1946, population growth will have added over 3.5 millions more, giving a "norm" of 58 millions. During the war, the labor force has expanded "abnormally" by almost 5 millions. These additions are mostly boys and girls under 20, oldsters 65 or over, and married women of 20-64. If they all seek work after the war, the labor force will total 63 millions.

In 1940, the labor force included 1.3 million youngsters in the 14-to-17 age group, 2.7 million of 18 and 19 years, 2.1 million oldsters 65 or over, and 1.0 million wives with children—7.1 million in all. Were we not only to wipe out the abnormal wartime increment of these workers, but also to eliminate the prewar job-seekers in these groups, the postwar labor force would be 51 millions.

- **Of course, neither extreme is realistic.** But what controls work rates? In 1940, about 95% of able-bodied males 20-64 sought work; always, this is our manpower backbone. Longer schooling, however, has consistently reduced the proportion of youngsters working—from 21% in 1930 to 13% in 1940 for the 14-17-year-olds, but only from 53% to 50% for those of 18 and 19. Education rises with living standards, but child labor bans also played a part. And in the depression, government-supported schools became relatively more attractive than work for the lower ages, whereas tuition costs held back those in the college ages. Work rates for those 65 or over

dropped from 34% in 1920 to 33% in 1930 to 23% in 1940—sharply reflecting the start of old-age pensions.

The proportion of working women of 20-64 has steadily risen. In 1940, work rates were almost 90% for single women not in school; 60% for the widowed, separated, or divorced, with or without children; but only 15% for the wives without children, and only 7% for those with children. Though more occupations gradually opened up to women, those with breadwinners either did not or could not enter them. The total of women seeking work would have been even less, except for the depression deferral of marriages and births, and unemployment of husbands.

- **All this shows** how social barriers have limited the number of women workers, and how social measures have cut down the proportion of young and old workers. Even so, neither barriers nor controls have had full scope.

Now, the war has put millions of youngsters, oldsters, and wives to work. This does more than alter habits, reduce barriers, and overcome controls so as to raise work-rates. It places in jobs many nonworkers dependent on 20-64 male breadwinners who, returning from the armed forces or war industries, cannot get jobs because their dependents have them. And you get a situation in which a single girl can't marry and quit until her ex-soldier fiancé gets into a job which some other bride-to-be may be holding. This can create "unemployment," just as in 1940 over five million men 20-64 were without jobs which were held by as many youngsters, oldsters, or wives.

- **Measures to reduce the labor force,** and so unemployment, may include personnel priorities on hiring ex-soldiers and firing dependents of working 20-64 males. They could encompass a shift in government costs from relief for unemployed heads of families to education aids or old-age grants. In general, the design must be to alter incentives from work to school, home, or retirement—rather than to straitjacket individual action. These measures could cut the labor force by five millions from what it would otherwise tend to be.

No call for such measures will arise if substantially full employment appears to be in sight. But we may well find that our peacetime industrial capacity is not sufficient to employ a maximum labor force, or that our economy is not quite geared to produce the business volume necessary—even though we do make possible higher living standards than ever. Full employment is, after all, a social goal, as unemployment is a social danger. And social measures to reduce unemployment are as proper, if not so important, as economic steps to increase employment.

*The Editors of Business Week*

**Business Week • February 5, 1944**



23% in  
ensions.  
0-64 has  
90% for  
ved, sepe  
but only  
7% for  
ns gradu  
ers either  
f women  
t for the  
d unem-

the num-  
have cut  
Even so,  
e.

oldsters,  
r habits,  
ise work-  
ndent on  
e armed  
se their  
in which  
er fiancé  
may be  
st as in  
bs which  
ves.

employ-  
ring ex-  
4 males.  
sts from  
tion aids  
to alter  
ement-  
se meas-  
om what

ially full  
well find  
cient to  
nomy is  
e neces-  
r living  
a social  
d social  
, if not  
pyment.

Week  
5, 1944

QEE. ADP  
LIBRARY

BU  
WI  
N